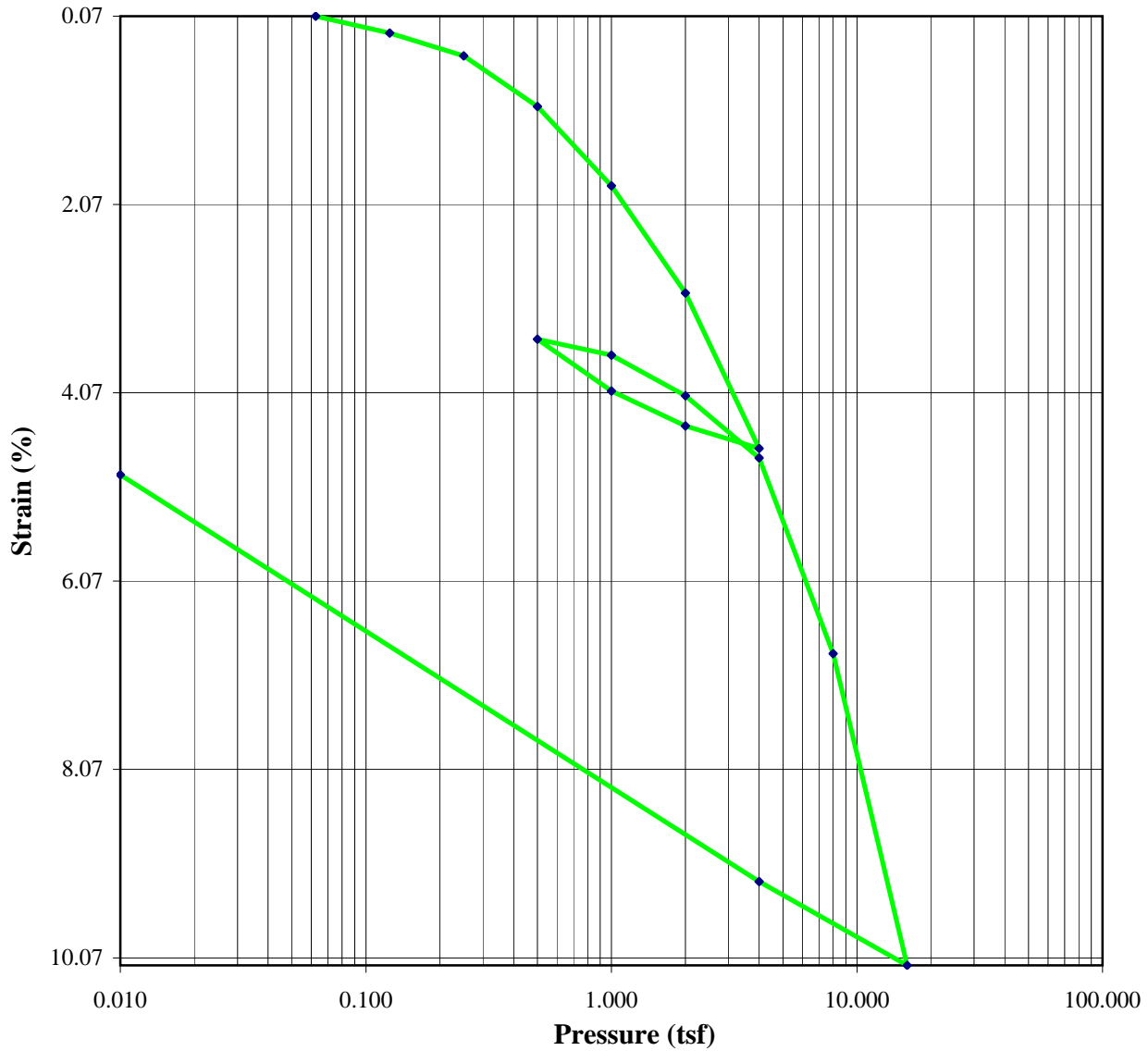
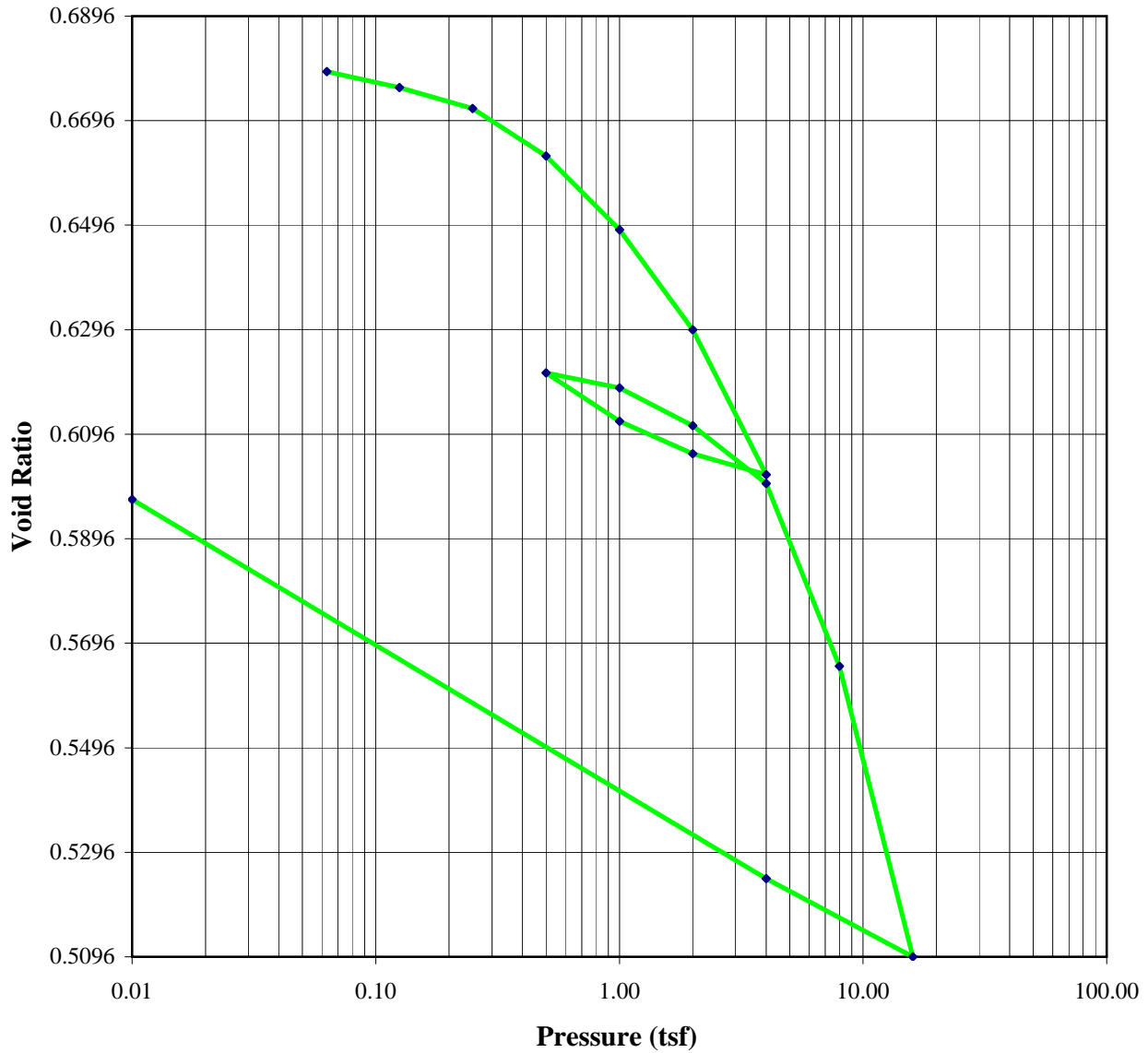


Consolidation Test Test Results



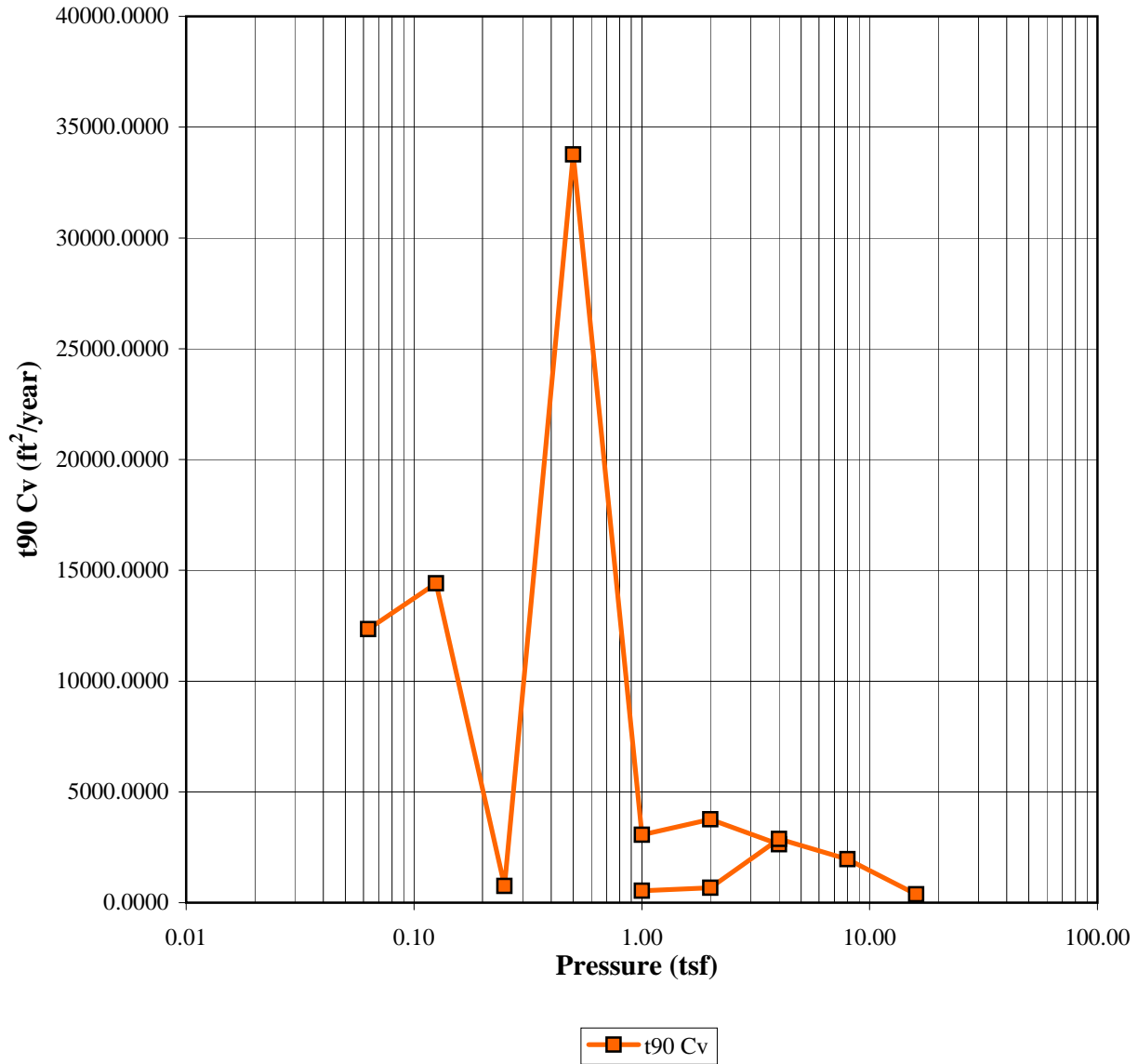
	Before	After	Liquid Limits:	25	Test Date:
Moisture (%):	21.46	25.44	Plastic Limits:	12	
Dry Density (pcf):	99.46	104.63	Plasticity Index (%):	13	
Saturation (%):	84.27	113.74			
Void Ratio:	0.6802	0.5972	Specific Gravity:	2.681	Measured
Soil Description:					
Project Number:	33489.1.1		Depth: 1.5-3.5ft		Remarks: Red Tan Clay Solid Height 0.5958 inches Est. Blows/ft= 4
Sample Number:	ST-1 (B-4137)	Boring Number:			
Project:	ST-1 (B-4137)				
Client:	Harnett Co. Sta. 21+00				

Consolidation Test Test Results



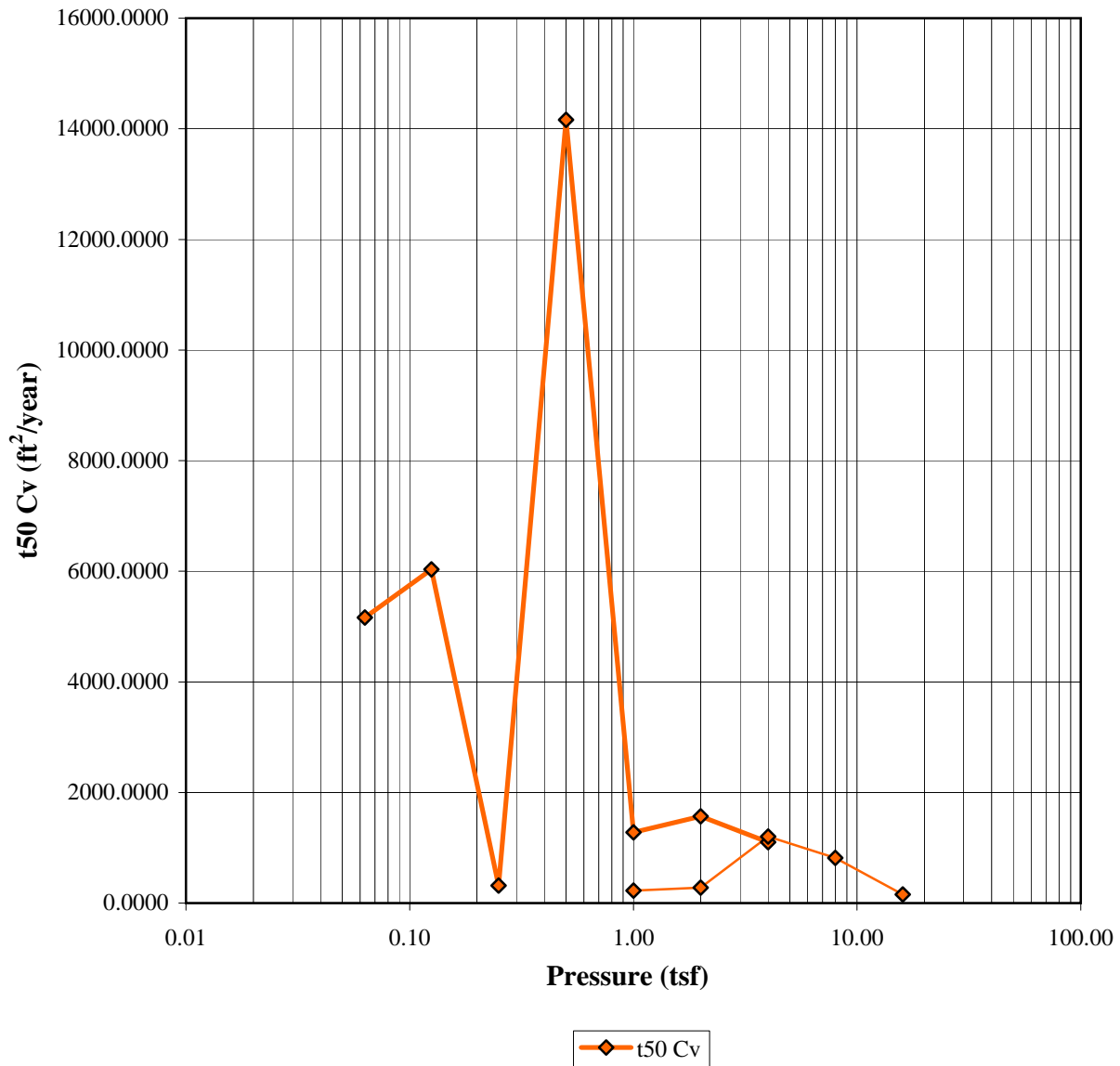
	Before	After	Liquid Limits:	25	Test Date:
Moisture (%):	21.46	25.44	Plastic Limits:	12	
Dry Density (pcf):	99.46	104.63	Plasticity Index (%):	13	
Saturation (%):	84.27	113.74			
Void Ratio:	0.6802	0.5972	Specific Gravity:	2.681	Measured
Soil Description:					
Project Number:	33489.1.1		Depth: 1.5-3.5ft		Remarks: Red Tan Clay Solid Height 0.5958 inches Est. Blows/ft= 4
Sample Number:	ST-1 (B-4137)		Boring Number:		
Project:	ST-1 (B-4137)				
Client:					
Location:	Harnett Co. Sta. 21+00				

Consolidation Test Test Results



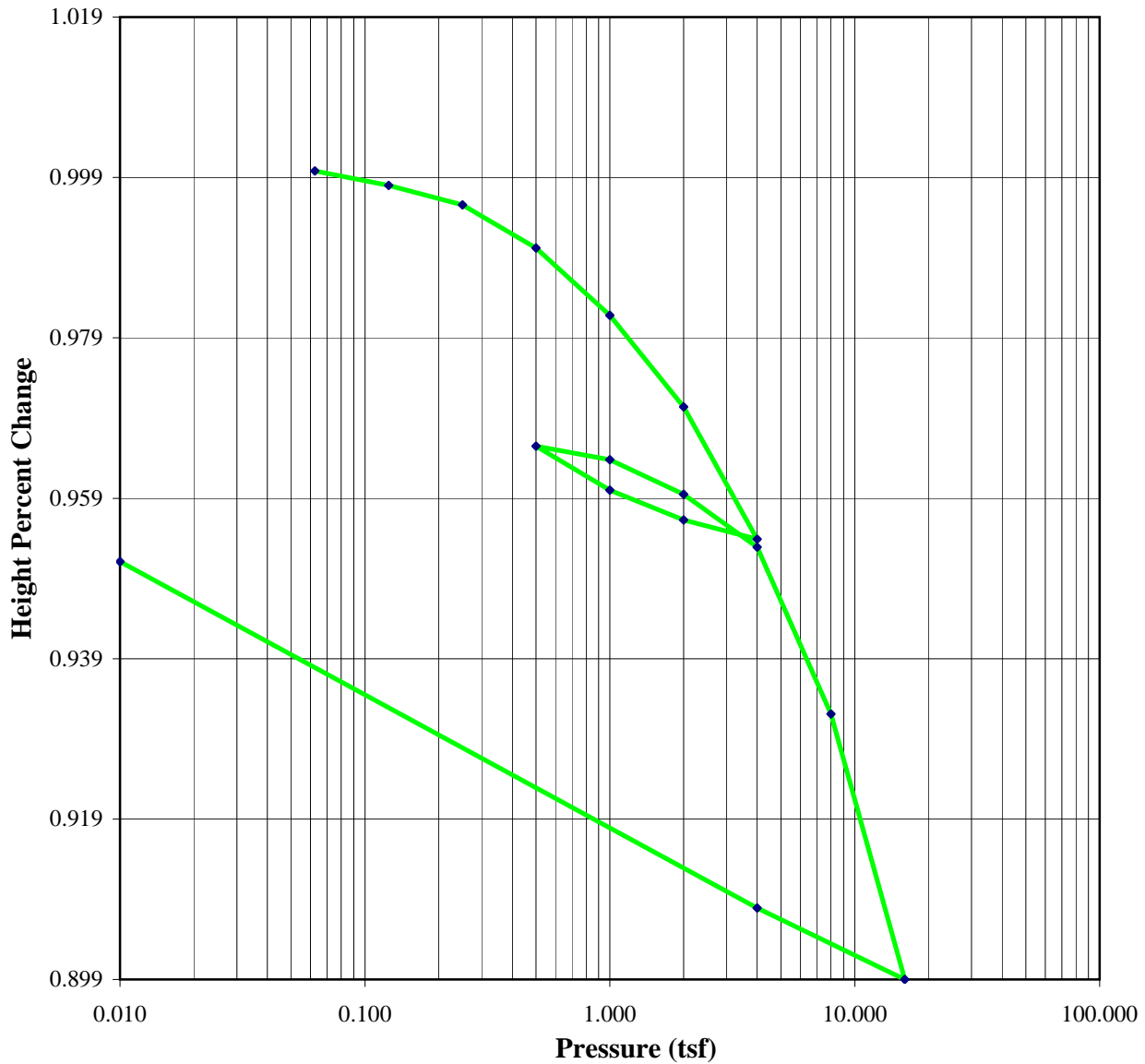
	Before	After	Liquid Limits:	25	Test Date:
Moisture (%):	21.46	25.44	Plastic Limits:	12	
Dry Density (pcf):	99.46	104.63	Plasticity Index (%):	13	
Saturation (%):	84.27	113.74			
Void Ratio:	0.6802	0.5972	Specific Gravity:	2.681	Measured
Soil Description:					
Project Number:	33489.1.1		Depth: 1.5-3.5ft		Remarks: Red Tan Clay Solid Height 0.5958 inches Est. Blows/ft= 4
Sample Number:	ST-1 (B-4137)	Boring Number:			
Project:	ST-1 (B-4137)				
Client:	Harnett Co. Sta. 21+00				

Consolidation Test Test Results



	Before	After	Liquid Limits:	25	Test Date:
Moisture (%):	21.46	25.44	Plastic Limits:	12	
Dry Density (pcf):	99.46	104.63	Plasticity Index (%):	13	
Saturation (%):	84.27	113.74			
Void Ratio:	0.6802	0.5972	Specific Gravity:	2.681	Measured
Soil Description:					
Project Number:	33489.1.1		Depth: 1.5-3.5ft		Remarks: Red Tan Clay Solid Height 0.5958 inches Est. Blows/ft= 4
Sample Number:	ST-1 (B-4137)	Boring Number:			
Project:	ST-1 (B-4137)				
Client:	Harnett Co. Sta. 21+00				

Consolidation Test Test Results



	Before	After	Liquid Limits:	25	Test Date:
Moisture (%):	21.46	25.44	Plastic Limits:	12	
Dry Density (pcf):	99.46	104.63	Plasticity Index (%):	13	
Saturation (%):	84.27	113.74			
Void Ratio:	0.6802	0.5972	Specific Gravity:	2.681	Measured
Soil Description:					
Project Number:	33489.1.1		Depth: 1.5-3.5ft		Remarks: Red Tan Clay Solid Height 0.5958 inches Est. Blows/ft= 4
Sample Number:	ST-1 (B-4137)	Boring Number:			
Project:	ST-1 (B-4137)				
Client:					
Location:	Harnett Co. Sta. 21+00				

Consolidation Test Results Summary

Project: ST-1 (B-4137)
Location: Harnett Co. Sta. 21+00
Job Number: T-4937 ST-1

Project Number: 33489.1.1

Sample Number: ST-1 (B-4137)
Boring Number:
Depth: 1.5-3.5ft
Sample Type: Undisturbed

Soil Description:
Remarks: Red Tan Clay Solid Height 0.5958 inches Est. Blows/ft= 4

Test Number:
Test Date:

Index	Load Sequence (tsf)	Cummulative Change in Height (in)	Specimen Height (in)	Height of Void (in)	Vertical Strain (%)	Void Ratio	t90 Fitting Time (min)	t50 Fitting Time (min)	t90 Cv (ft2/year)	t50 Cv (ft2/year)
0	0.000	0.0000	1.0000	0.4048	0.00	0.6802	0.000	0.000	0.000	0.000
1	0.063	0.0007	0.9993	0.4041	0.07	0.6790	0.063	* 0.0348	12345.713	5161.974
2	0.125	0.0025	0.9975	0.4023	0.25	0.6760	0.054	* 0.0297	14413.590	6033.256
3	0.250	0.0049	0.9951	0.3999	0.49	0.6719	1.017	* 0.5651	755.066	315.758
4	0.500	0.0103	0.9897	0.3945	1.03	0.6629	0.023	* 0.0125	33773.652	14163.240
5	1.000	0.0187	0.9813	0.3861	1.87	0.6488	0.246	* 0.1365	3058.369	1279.027
6	2.000	0.0301	0.9699	0.3747	3.01	0.6296	0.196	* 0.1089	3756.599	1571.140
7	4.000	0.0466	0.9534	0.3582	4.66	0.6019	0.272	* 0.1512	2629.449	1099.465
8	2.000	0.0442	0.9558	0.3606	4.42	0.6059	0.000	0.000	0.000	0.000
9	1.000	0.0405	0.9595	0.3643	4.05	0.6121	0.000	0.000	0.000	0.000
10	0.500	0.0350	0.9650	0.3698	3.50	0.6214	0.000	0.000	0.000	0.000
11	1.000	0.0367	0.9633	0.3681	3.67	0.6185	1.323	* 0.7350	543.701	227.353
12	2.000	0.0410	0.9590	0.3638	4.10	0.6113	1.061	* 0.5894	673.753	281.755
13	4.000	0.0476	0.9524	0.3572	4.76	0.6002	0.246	* 0.1365	2876.205	1202.845
14	8.000	0.0684	0.9316	0.3364	6.84	0.5653	0.351	* 0.1949	1957.421	818.444
15	16.000	0.1015	0.8985	0.3033	10.15	0.5096	1.716	* 0.9535	377.502	157.859
16	4.000	0.0926	0.9074	0.3122	9.26	0.5246	0.000	0.000	0.000	0.000
17	0.010	0.0494	0.9506	0.3554	4.94	0.5972	0.000	0.000	0.000	0.000

Predicted value indicated with *

Tested By:

Checked By:

Consolidation Test
Consolidation Specimen Information

Project: ST-1 (B-4137) **Project Number:** 33489.1.1
Location: Harnett Co. Sta. 21+00
Job Number: T-4937 ST-1 **Test Date:**

Sample Number: ST-1 (B-4137) **Soil Description:**
Boring Number:
Depth: 1.5-3.5ft **Remarks:**
Sample Type: Undisturbed Red Tan Clay Solid Height 0.5958 inches Est. Blows/ft= 4

Test Number:
Liquid Limit: 25.0000 **Initial Void Ratio:** **Initial Height (in):** 1.0000
Plastic Limit: 12.0000 **Plasticity Index (%):** 13.0000 **Initial Diameter (in):** 2.5000
Specific Gravity: 2.6810 **Weight of Ring (g):** 111.2700
Measured

Parameters	Initial Specimen	Final Specimen
Moist Weight + Container (g)	155.66	160.76
Dry Soil + Container (g)	128.16	128.16
Weight of Container (g)	0.00	0.00
Moisture Content (%)	21.46	25.44
Void Ratio	0.6802	0.5972
Saturation (%)	84.27	113.74
Dry Density (pcf)	99.46	104.63

Tested By:

Checked By:

Consolidation Test Results
(Sequence 1) Load 0.063 tsf

Project: ST-1 (B-4137) **Project Number:** 33489.1.1
Location: Harnett Co. Sta. 21+00
Job Number: T-4937 ST-1 **Test Date:**
Test Number:
Sample Number: ST-1 (B-4137) **Soil Description:**
Boring Number:
Depth: 1.5-3.5ft **Remarks:**
Sample Type: Undisturbed Red Tan Clay Solid Height 0.5958 inches Est. Blows/ft= 4

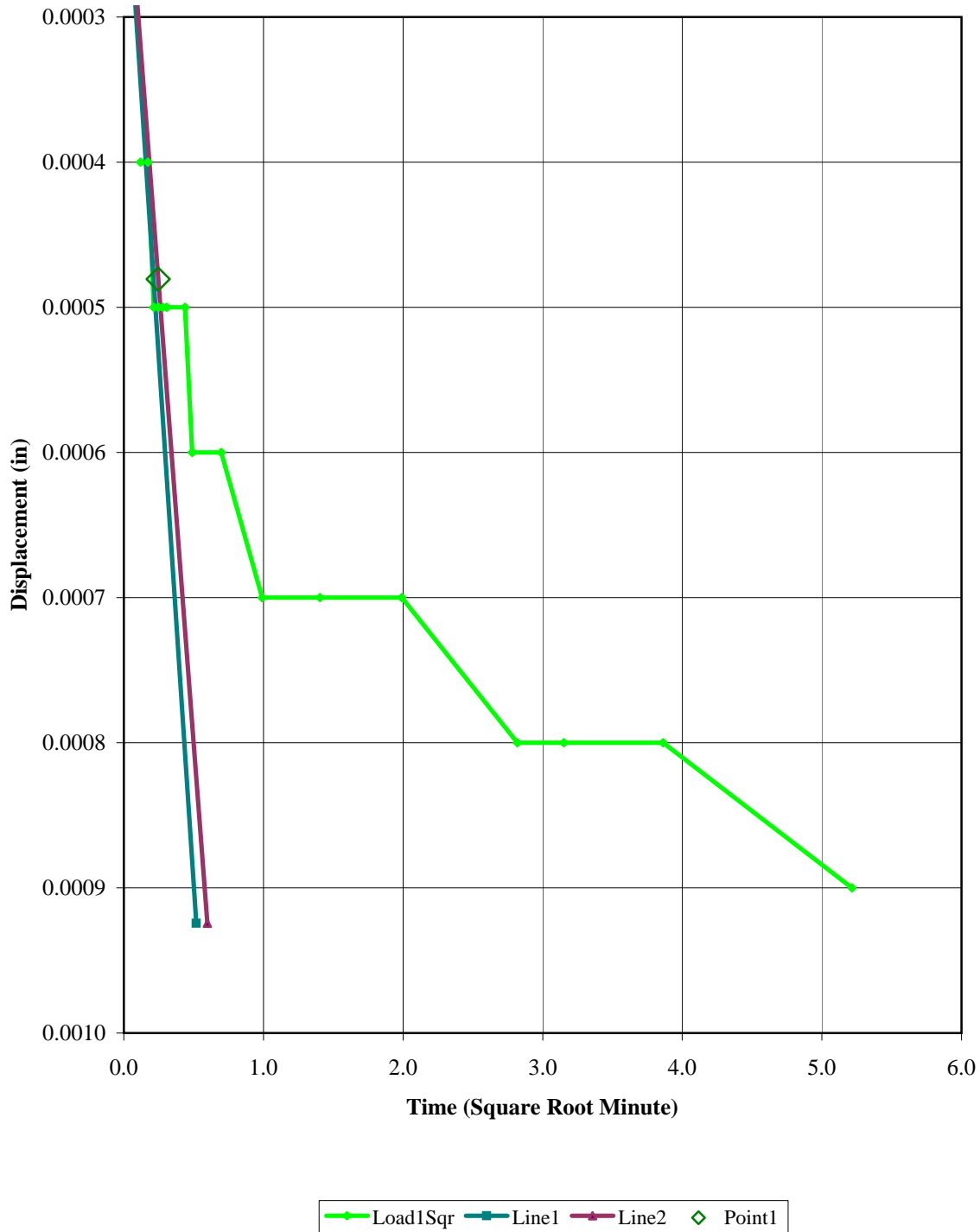
Index	Time	Displacement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0001	0.0000	0.6802
1	00:00:01	0.0004	0.0200	0.6798
2	00:00:02	0.0004	0.0200	0.6798
3	00:00:03	0.0005	0.0300	0.6797
4	00:00:04	0.0005	0.0300	0.6797
5	00:00:05	0.0005	0.0300	0.6797
6	00:00:06	0.0005	0.0300	0.6797
7	00:00:12	0.0005	0.0300	0.6797
8	00:00:15	0.0006	0.0400	0.6795
9	00:00:30	0.0006	0.0400	0.6795
10	00:01:00	0.0007	0.0500	0.6793
11	00:02:00	0.0007	0.0500	0.6793
12	00:04:00	0.0007	0.0500	0.6793
13	00:08:00	0.0008	0.0600	0.6792
14	00:10:00	0.0008	0.0600	0.6792
15	00:15:00	0.0008	0.0600	0.6792
16	00:27:18	0.0009	0.0700	0.6790

Tested By:

Checked By:

Consolidation Test Results
(Sequence 1) Load 0.063 tsf

Consolidation Graph (Square-root Time)



Consolidation Test Results (Sequence 2) Load 0.125 tsf

Project: ST-1 (B-4137)

Project Number: 33489.1.1

Location: Harnett Co. Sta. 21+00

Job Number: T-4937 ST-1

Test Date:

Test Number:

Sample Number: ST-1 (B-4137) **Soil Description:**

Boring Number:

Depth: 1.5-3.5ft

Remarks:

Sample Type: Undisturbed **Red Tan Clay Solid Height 0.5958 inches Est. Blows/ft= 4**

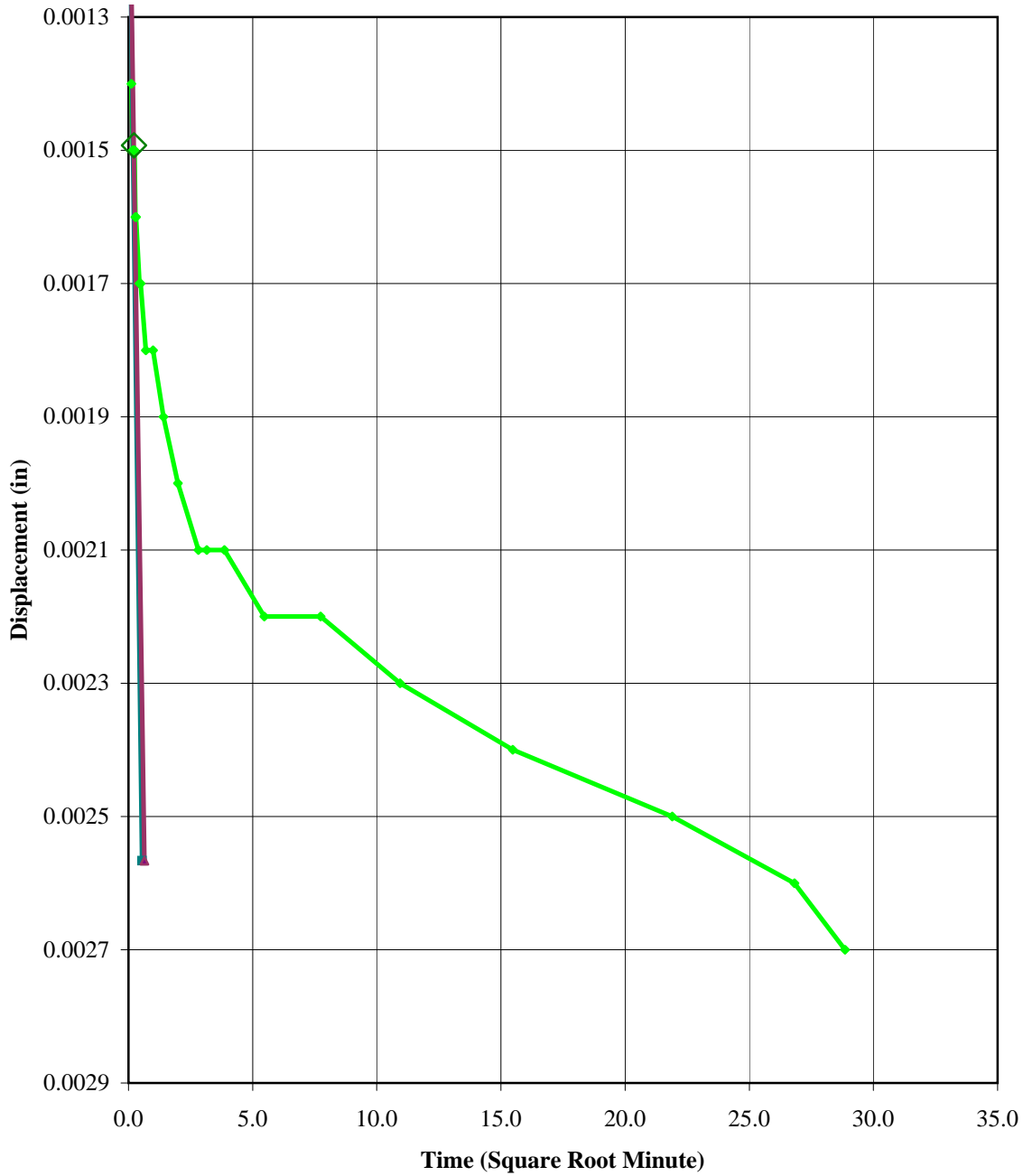
Index	Time	Displacement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0009	0.0700	0.6790
1	00:00:01	0.0014	0.1200	0.6782
2	00:00:02	0.0015	0.1300	0.6780
3	00:00:03	0.0015	0.1300	0.6780
4	00:00:04	0.0015	0.1300	0.6780
5	00:00:05	0.0016	0.1400	0.6778
6	00:00:06	0.0016	0.1400	0.6778
7	00:00:12	0.0017	0.1500	0.6777
8	00:00:15	0.0017	0.1500	0.6777
9	00:00:30	0.0018	0.1600	0.6775
10	00:01:00	0.0018	0.1600	0.6775
11	00:02:00	0.0019	0.1700	0.6773
12	00:04:00	0.0020	0.1800	0.6772
13	00:08:00	0.0021	0.1900	0.6770
14	00:10:00	0.0021	0.1900	0.6770
15	00:15:00	0.0021	0.1900	0.6770
16	00:29:59	0.0022	0.2000	0.6768
17	00:59:58	0.0022	0.2000	0.6768
18	01:59:57	0.0023	0.2100	0.6767
19	03:59:53	0.0024	0.2200	0.6765
20	07:59:46	0.0025	0.2300	0.6763
21	11:59:39	0.0026	0.2400	0.6761
22	13:53:10	0.0027	0.2500	0.6760

Tested By:

Checked By:

**Consolidation Test Results
(Sequence 2) Load 0.125 tsf**

Consolidation Graph (Square-root Time)



Consolidation Test Results (Sequence 3) Load 0.250 tsf

Project: ST-1 (B-4137)

Project Number: 33489.1.1

Location: Harnett Co. Sta. 21+00

Job Number: T-4937 ST-1

Test Date:

Test Number:

Sample Number: ST-1 (B-4137) **Soil Description:**

Boring Number:

Depth: 1.5-3.5ft

Remarks:

Sample Type: Undisturbed **Red Tan Clay Solid Height 0.5958 inches Est. Blows/ft= 4**

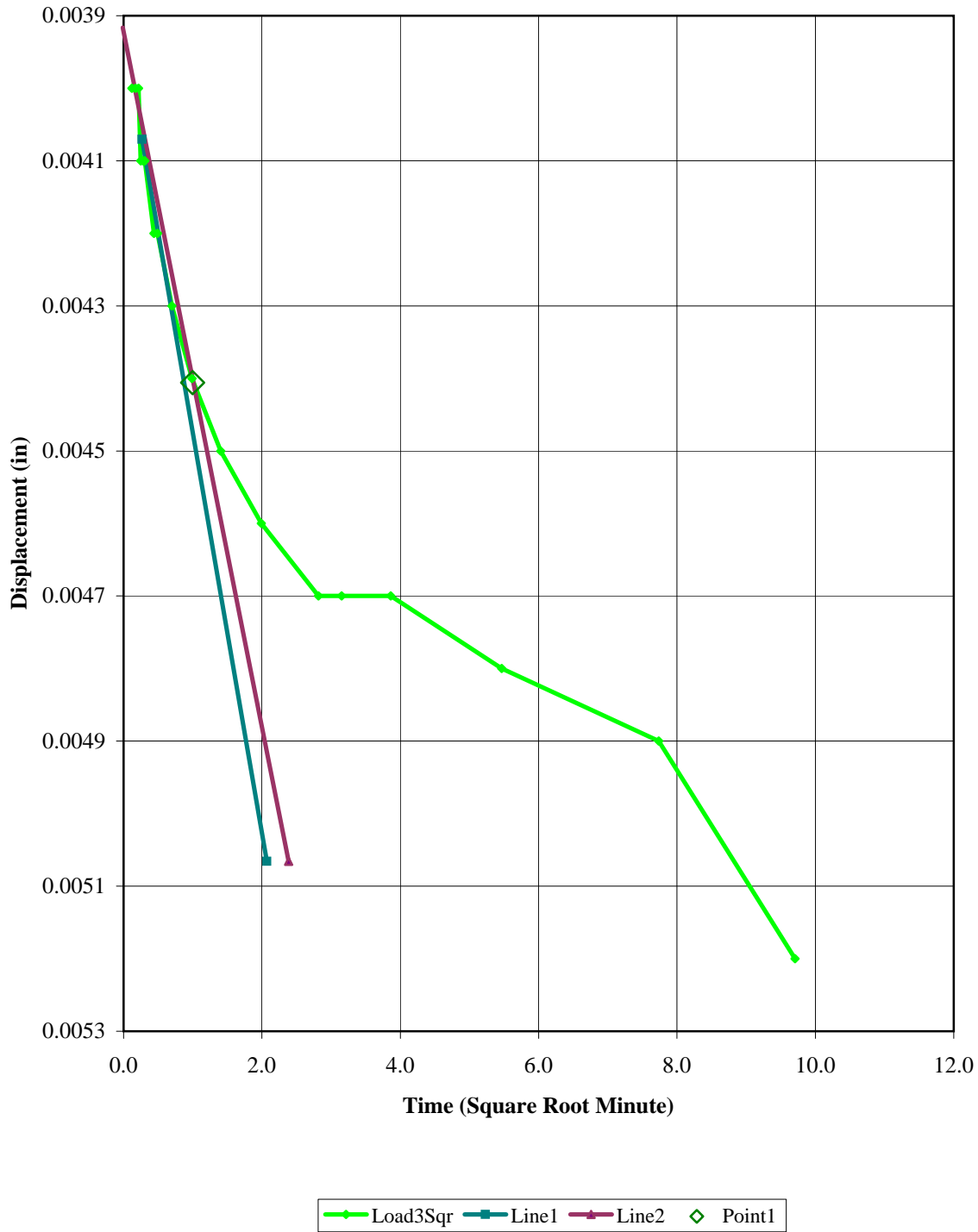
Index	Time	Displacement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0027	0.2500	0.6760
1	00:00:01	0.0040	0.3700	0.6740
2	00:00:02	0.0040	0.3700	0.6740
3	00:00:03	0.0040	0.3700	0.6740
4	00:00:04	0.0041	0.3800	0.6738
5	00:00:05	0.0041	0.3800	0.6738
6	00:00:06	0.0041	0.3800	0.6738
7	00:00:12	0.0042	0.3900	0.6736
8	00:00:15	0.0042	0.3900	0.6736
9	00:00:30	0.0043	0.4000	0.6735
10	00:01:00	0.0044	0.4100	0.6733
11	00:02:00	0.0045	0.4200	0.6731
12	00:04:00	0.0046	0.4300	0.6730
13	00:08:00	0.0047	0.4400	0.6728
14	00:10:00	0.0047	0.4400	0.6728
15	00:15:00	0.0047	0.4400	0.6728
16	00:30:00	0.0048	0.4500	0.6726
17	01:00:00	0.0049	0.4600	0.6725
18	01:34:22	0.0052	0.4900	0.6719

Tested By:

Checked By:

**Consolidation Test Results
(Sequence 3) Load 0.250 tsf**

Consolidation Graph (Square-root Time)



Consolidation Test Results
(Sequence 4) Load 0.500 tsf

Project: ST-1 (B-4137)

Project Number: 33489.1.1

Location: Harnett Co. Sta. 21+00

Job Number: T-4937 ST-1

Test Date:

Test Number:

Sample Number: ST-1 (B-4137) **Soil Description:**

Boring Number:

Depth: 1.5-3.5ft

Remarks:

Sample Type: Undisturbed Red Tan Clay Solid Height 0.5958 inches Est. Blows/ft= 4

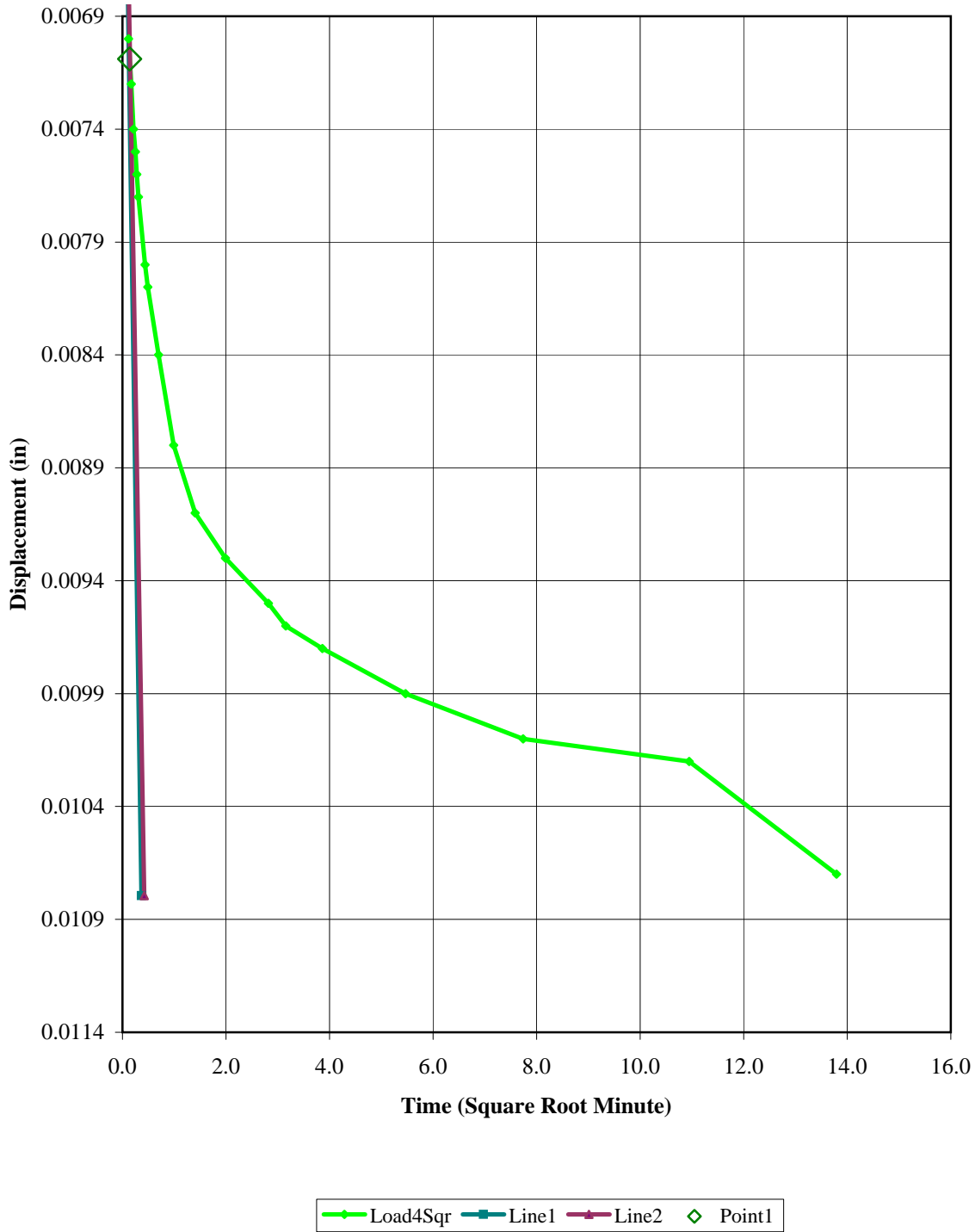
Index	Time	Displacement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0052	0.4900	0.6719
1	00:00:01	0.0070	0.6600	0.6691
2	00:00:02	0.0072	0.6800	0.6688
3	00:00:03	0.0074	0.7000	0.6684
4	00:00:04	0.0075	0.7100	0.6683
5	00:00:05	0.0076	0.7200	0.6681
6	00:00:06	0.0077	0.7300	0.6679
7	00:00:12	0.0080	0.7600	0.6674
8	00:00:15	0.0081	0.7700	0.6672
9	00:00:30	0.0084	0.8000	0.6667
10	00:01:00	0.0088	0.8400	0.6661
11	00:02:00	0.0091	0.8700	0.6656
12	00:04:00	0.0093	0.8900	0.6652
13	00:08:00	0.0095	0.9100	0.6649
14	00:10:00	0.0096	0.9200	0.6647
15	00:15:00	0.0097	0.9300	0.6646
16	00:30:01	0.0099	0.9500	0.6642
17	01:00:02	0.0101	0.9700	0.6639
18	02:00:03	0.0102	0.9800	0.6637
19	03:10:35	0.0107	1.0300	0.6629

Tested By:

Checked By:

**Consolidation Test Results
(Sequence 4) Load 0.500 tsf**

Consolidation Graph (Square-root Time)



Consolidation Test Results (Sequence 5) Load 1.000 tsf

Project: ST-1 (B-4137)

Project Number: 33489.1.1

Location: Harnett Co. Sta. 21+00

Job Number: T-4937 ST-1

Test Date:

Test Number:

Sample Number: ST-1 (B-4137) **Soil Description:**

Boring Number:

Depth: 1.5-3.5ft

Remarks:

Sample Type: Undisturbed **Red Tan Clay Solid Height 0.5958 inches Est. Blows/ft= 4**

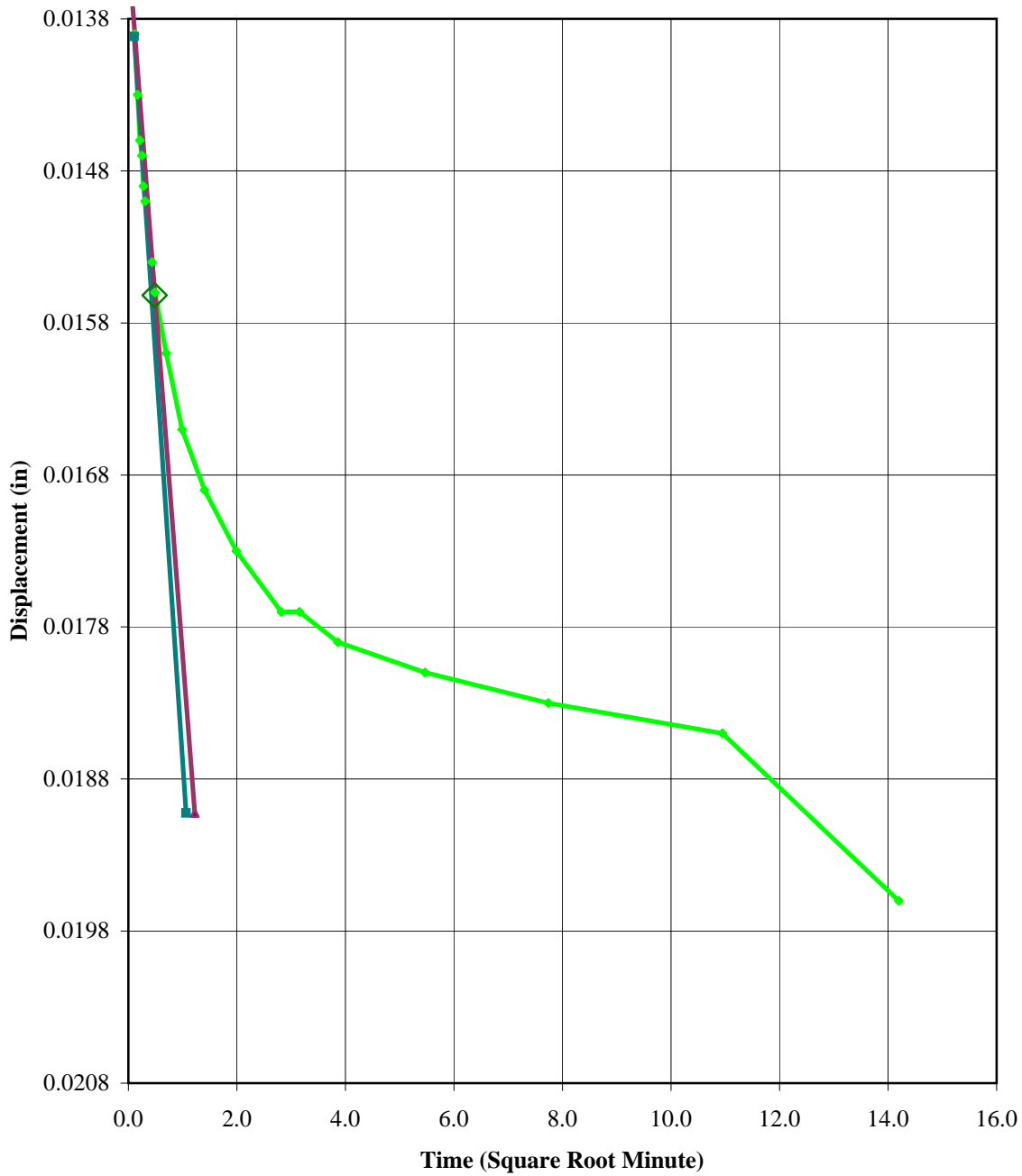
Index	Time	Displacement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0107	1.0300	0.6629
1	00:00:01	0.0139	1.3000	0.6583
2	00:00:02	0.0143	1.3400	0.6577
3	00:00:03	0.0146	1.3700	0.6572
4	00:00:04	0.0147	1.3800	0.6570
5	00:00:05	0.0149	1.4000	0.6567
6	00:00:06	0.0150	1.4100	0.6565
7	00:00:12	0.0154	1.4500	0.6558
8	00:00:15	0.0156	1.4700	0.6555
9	00:00:30	0.0160	1.5100	0.6548
10	00:01:00	0.0165	1.5600	0.6540
11	00:02:00	0.0169	1.6000	0.6533
12	00:04:00	0.0173	1.6400	0.6526
13	00:08:00	0.0177	1.6800	0.6520
14	00:10:00	0.0177	1.6800	0.6520
15	00:15:00	0.0179	1.7000	0.6516
16	00:30:00	0.0181	1.7200	0.6513
17	01:00:01	0.0183	1.7400	0.6509
18	02:00:02	0.0185	1.7600	0.6506
19	03:21:48	0.0196	1.8700	0.6488

Tested By:

Checked By:

Consolidation Test Results
(Sequence 5) Load 1.000 tsf

Consolidation Graph (Square-root Time)



Load1Sqr Line1 Line2 Point1

Consolidation Test Results
(Sequence 6) Load 2.000 tsf

Project: ST-1 (B-4137)

Project Number: 33489.1.1

Location: Harnett Co. Sta. 21+00

Job Number: T-4937 ST-1

Test Date:

Test Number:

Sample Number: ST-1 (B-4137) **Soil Description:**

Boring Number:

Depth: 1.5-3.5ft

Remarks:

Sample Type: Undisturbed **Red Tan Clay Solid Height 0.5958 inches Est. Blows/ft= 4**

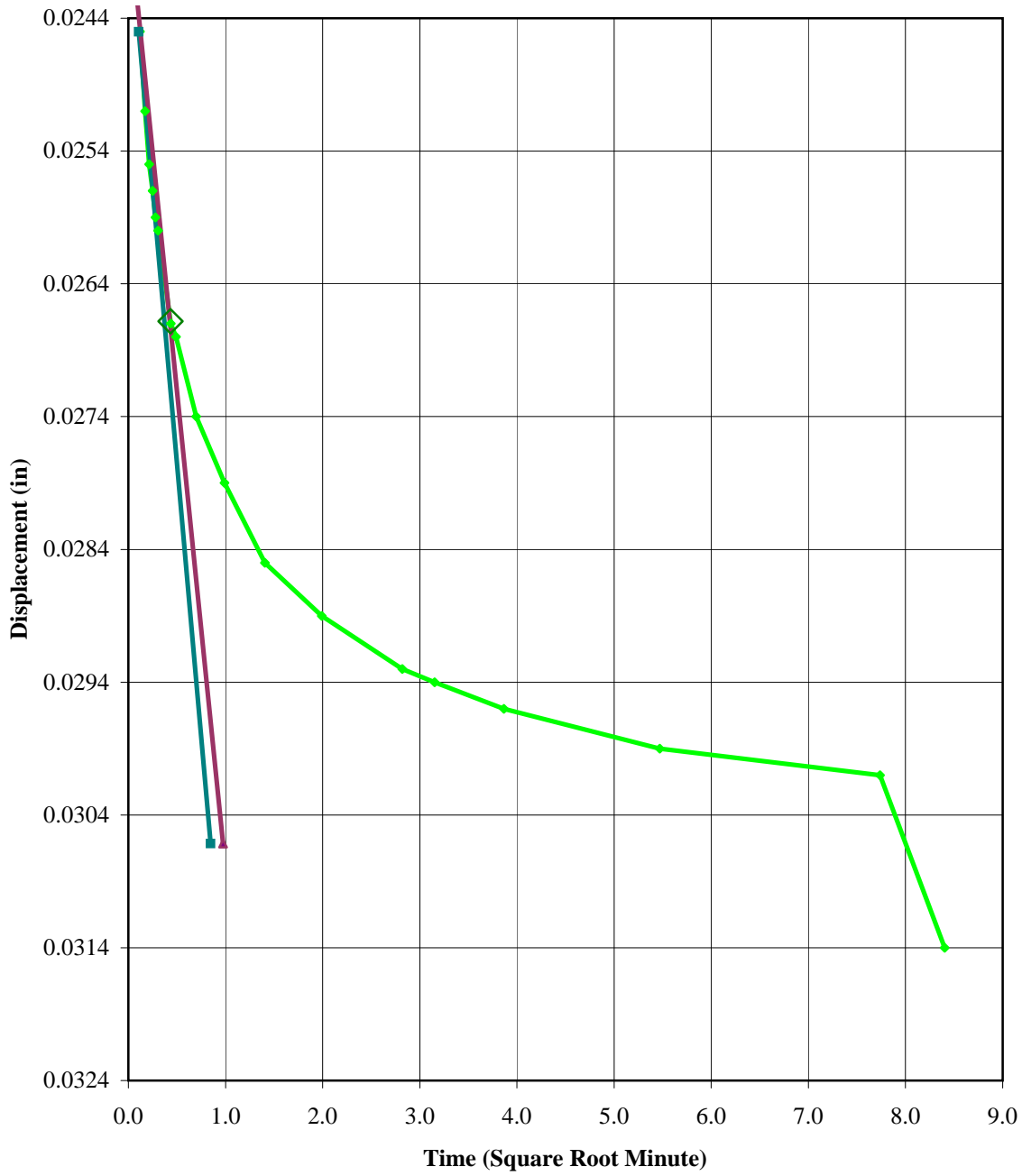
Index	Time	Displacement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0196	1.8700	0.6488
1	00:00:01	0.0245	2.3200	0.6412
2	00:00:02	0.0251	2.3800	0.6402
3	00:00:03	0.0255	2.4200	0.6395
4	00:00:04	0.0257	2.4400	0.6392
5	00:00:05	0.0259	2.4600	0.6388
6	00:00:06	0.0260	2.4700	0.6387
7	00:00:12	0.0267	2.5400	0.6375
8	00:00:15	0.0268	2.5500	0.6373
9	00:00:30	0.0274	2.6100	0.6363
10	00:01:00	0.0279	2.6600	0.6355
11	00:02:00	0.0285	2.7200	0.6345
12	00:04:00	0.0289	2.7600	0.6338
13	00:08:00	0.0293	2.8000	0.6331
14	00:10:00	0.0294	2.8100	0.6330
15	00:15:01	0.0296	2.8300	0.6326
16	00:30:01	0.0299	2.8600	0.6321
17	01:00:02	0.0301	2.8800	0.6318
18	01:10:46	0.0314	3.0100	0.6296

Tested By:

Checked By:

Consolidation Test Results
(Sequence 6) Load 2.000 tsf

Consolidation Graph (Square-root Time)



Load1Sqr Line1 Line2 Point1

Consolidation Test Results (Sequence 7) Load 4.000 tsf

Project: ST-1 (B-4137)

Project Number: 33489.1.1

Location: Harnett Co. Sta. 21+00

Job Number: T-4937 ST-1

Test Date:

Test Number:

Sample Number: ST-1 (B-4137) **Soil Description:**

Boring Number:

Depth: 1.5-3.5ft

Remarks:

Sample Type: Undisturbed **Red Tan Clay Solid Height 0.5958 inches Est. Blows/ft= 4**

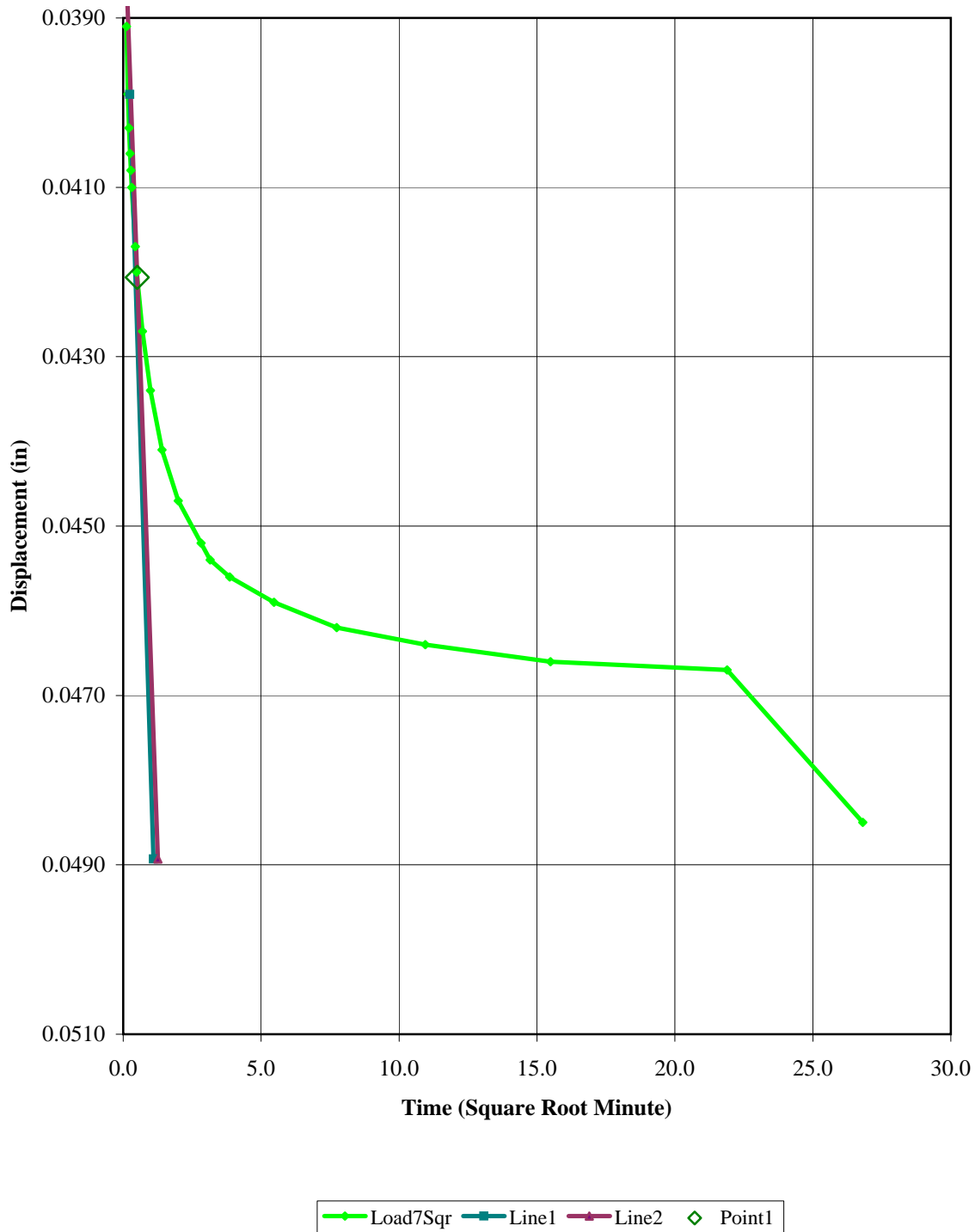
Index	Time	Displacement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0314	3.0100	0.6296
1	00:00:01	0.0391	3.7200	0.6177
2	00:00:02	0.0399	3.8000	0.6163
3	00:00:03	0.0403	3.8400	0.6157
4	00:00:04	0.0406	3.8700	0.6152
5	00:00:05	0.0408	3.8900	0.6148
6	00:00:06	0.0410	3.9100	0.6145
7	00:00:12	0.0417	3.9800	0.6133
8	00:00:15	0.0420	4.0100	0.6128
9	00:00:30	0.0427	4.0800	0.6116
10	00:01:00	0.0434	4.1500	0.6105
11	00:02:00	0.0441	4.2200	0.6093
12	00:04:00	0.0447	4.2800	0.6083
13	00:08:00	0.0452	4.3300	0.6074
14	00:10:00	0.0454	4.3500	0.6071
15	00:15:00	0.0456	4.3700	0.6068
16	00:30:00	0.0459	4.4000	0.6063
17	01:00:01	0.0462	4.4300	0.6057
18	02:00:03	0.0464	4.4500	0.6054
19	04:00:06	0.0466	4.4700	0.6051
20	07:59:43	0.0467	4.4800	0.6049
21	11:59:07	0.0485	4.6600	0.6019

Tested By:

Checked By:

Consolidation Test Results
(Sequence 7) Load 4.000 tsf

Consolidation Graph (Square-root Time)



**Consolidation Test Results
(Sequence 8) Rebound 2.000 tsf**

Project: ST-1 (B-4137)

Project Number: 33489.1.1

Location: Harnett Co. Sta. 21+00

Job Number: T-4937 ST-1

Test Date:

Test Number:

Sample Number: ST-1 (B-4137) **Soil Description:**

Boring Number:

Depth: 1.5-3.5ft

Remarks:

Sample Type: Undisturbed Red Tan Clay Solid Height 0.5958 inches Est. Blows/ft= 4

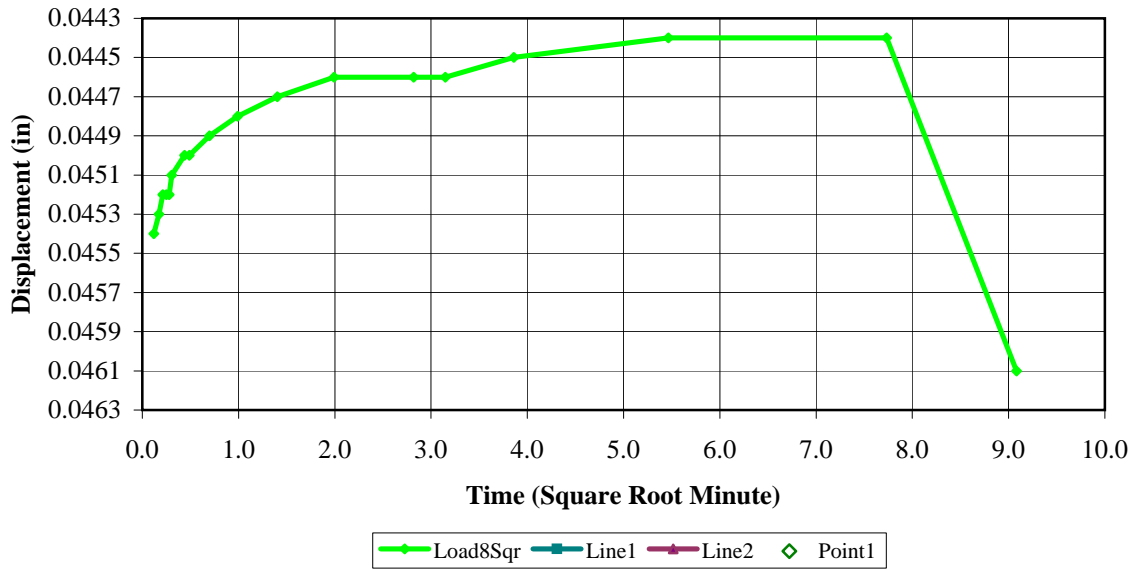
Index	Time	Displacement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0485	4.6600	0.6019
1	00:00:01	0.0454	4.3500	0.6071
2	00:00:02	0.0453	4.3400	0.6073
3	00:00:03	0.0452	4.3300	0.6074
4	00:00:04	0.0452	4.3300	0.6074
5	00:00:05	0.0452	4.3300	0.6074
6	00:00:06	0.0451	4.3200	0.6076
7	00:00:12	0.0450	4.3100	0.6078
8	00:00:15	0.0450	4.3100	0.6078
9	00:00:30	0.0449	4.3000	0.6079
10	00:01:00	0.0448	4.2900	0.6081
11	00:02:00	0.0447	4.2800	0.6083
12	00:04:00	0.0446	4.2700	0.6084
13	00:08:00	0.0446	4.2700	0.6084
14	00:09:59	0.0446	4.2700	0.6084
15	00:14:59	0.0445	4.2600	0.6086
16	00:29:59	0.0444	4.2500	0.6088
17	00:59:58	0.0444	4.2500	0.6088
18	01:22:41	0.0461	4.4200	0.6059

Tested By:

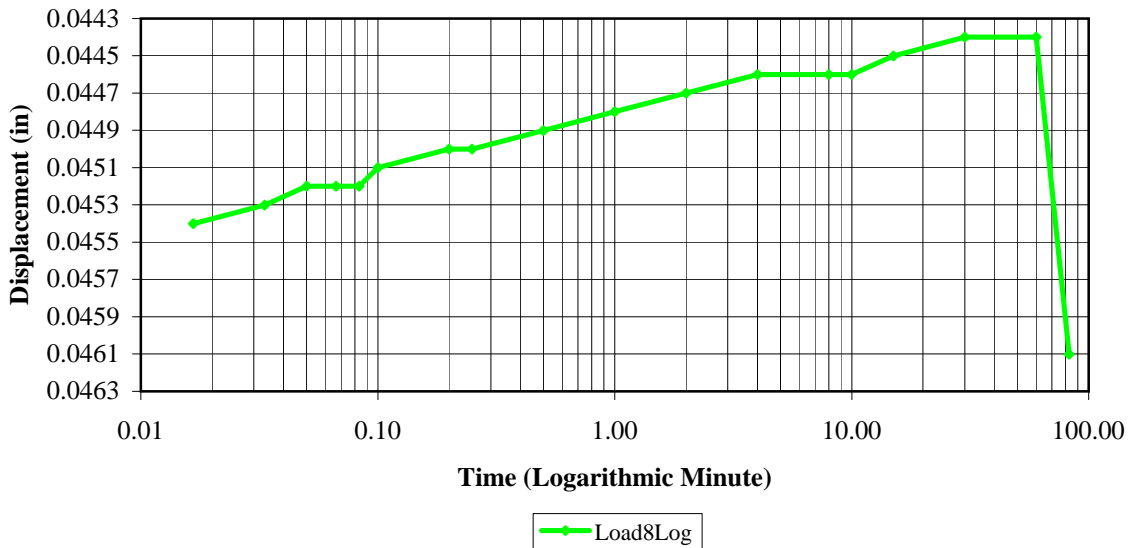
Checked By:

**Consolidation Test Results
(Sequence 8) Rebound 2.000 tsf**

Consolidation Graph (Square-root Time)



Consolidation Graph (Logarithmic Time)



Consolidation Test Results
(Sequence 9) Rebound 1.000 tsf

Project: ST-1 (B-4137)

Project Number: 33489.1.1

Location: Harnett Co. Sta. 21+00

Job Number: T-4937 ST-1

Test Date:

Test Number:

Sample Number: ST-1 (B-4137) **Soil Description:**

Boring Number:

Depth: 1.5-3.5ft

Remarks:

Sample Type: Undisturbed Red Tan Clay Solid Height 0.5958 inches Est. Blows/ft= 4

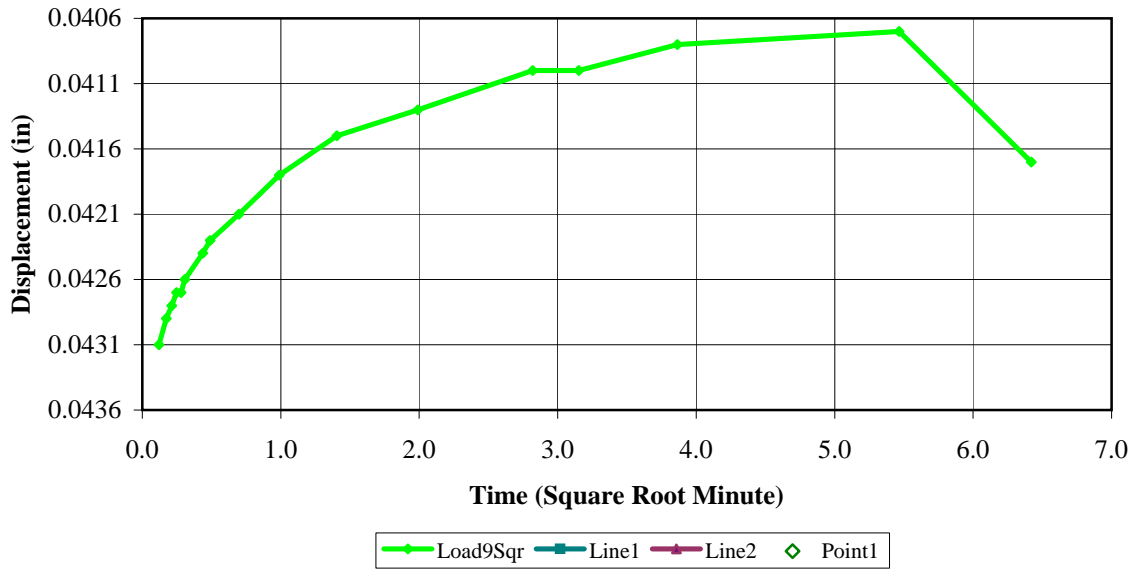
Index	Time	Displacement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0461	4.4200	0.6059
1	00:00:01	0.0431	4.1900	0.6098
2	00:00:02	0.0429	4.1700	0.6101
3	00:00:03	0.0428	4.1600	0.6103
4	00:00:04	0.0427	4.1500	0.6105
5	00:00:05	0.0427	4.1500	0.6105
6	00:00:06	0.0426	4.1400	0.6106
7	00:00:12	0.0424	4.1200	0.6110
8	00:00:15	0.0423	4.1100	0.6111
9	00:00:30	0.0421	4.0900	0.6115
10	00:01:00	0.0418	4.0600	0.6120
11	00:02:00	0.0415	4.0300	0.6125
12	00:04:00	0.0413	4.0100	0.6128
13	00:08:00	0.0410	3.9800	0.6133
14	00:10:00	0.0410	3.9800	0.6133
15	00:15:00	0.0408	3.9600	0.6136
16	00:29:59	0.0407	3.9500	0.6138
17	00:41:20	0.0417	4.0500	0.6121

Tested By:

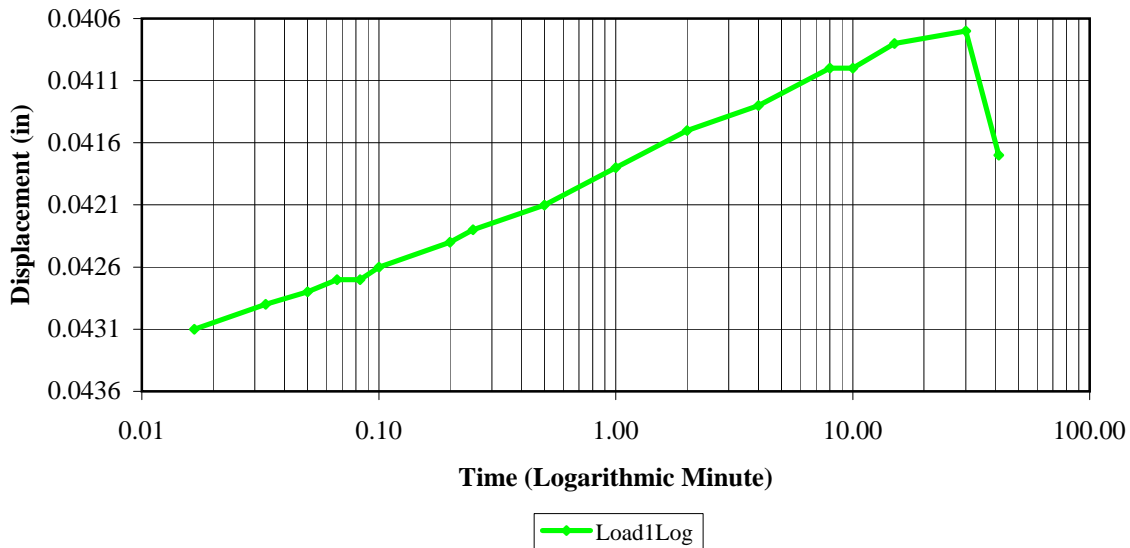
Checked By:

**Consolidation Test Results
(Sequence 9) Rebound 1.000 tsf**

Consolidation Graph (Square root Time)



Consolidation Graph (Logarithmic Time)



Consolidation Test Results
(Sequence 10) Rebound 0.500 tsf

Project: ST-1 (B-4137)

Project Number: 33489.1.1

Location: Harnett Co. Sta. 21+00

Job Number: T-4937 ST-1

Test Date:

Test Number:

Sample Number: ST-1 (B-4137) **Soil Description:**

Boring Number:

Depth: 1.5-3.5ft

Remarks:

Sample Type: Undisturbed Red Tan Clay Solid Height 0.5958 inches Est. Blows/ft= 4

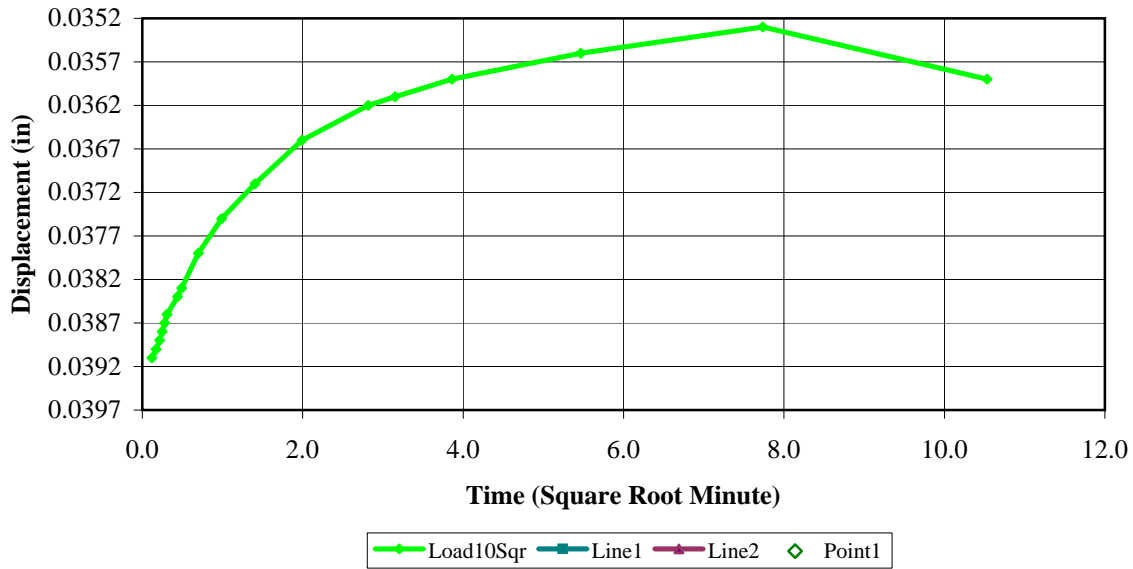
Index	Time	Displacement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0417	4.0500	0.6121
1	00:00:01	0.0391	3.8200	0.6160
2	00:00:02	0.0390	3.8100	0.6162
3	00:00:03	0.0389	3.8000	0.6163
4	00:00:04	0.0388	3.7900	0.6165
5	00:00:05	0.0387	3.7800	0.6167
6	00:00:06	0.0386	3.7700	0.6168
7	00:00:12	0.0384	3.7500	0.6172
8	00:00:15	0.0383	3.7400	0.6173
9	00:00:30	0.0379	3.7000	0.6180
10	00:01:00	0.0375	3.6600	0.6187
11	00:02:00	0.0371	3.6200	0.6194
12	00:04:00	0.0366	3.5700	0.6202
13	00:08:00	0.0362	3.5300	0.6209
14	00:10:00	0.0361	3.5200	0.6210
15	00:15:00	0.0359	3.5000	0.6214
16	00:30:00	0.0356	3.4700	0.6219
17	01:00:00	0.0353	3.4400	0.6224
18	01:51:10	0.0359	3.5000	0.6214

Tested By:

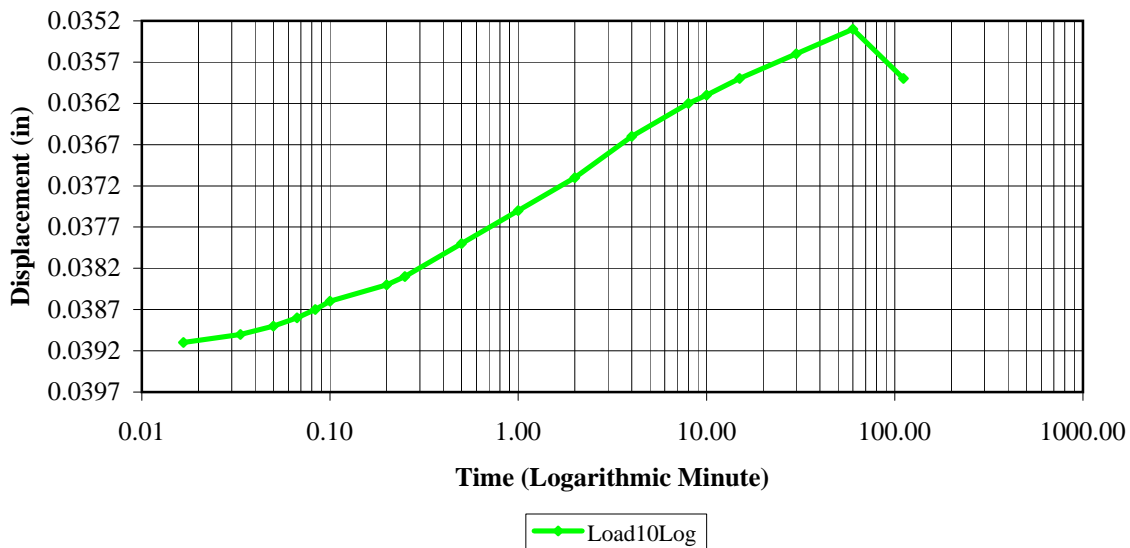
Checked By:

**Consolidation Test Results
(Sequence 10) Rebound 0.500 tsf**

Consolidation Graph (Square-root Time)



Consolidation Graph (Logarithmic Time)



Consolidation Test Results (Sequence 11) Load 1.000 tsf

Project: ST-1 (B-4137)

Project Number: 33489.1.1

Location: Harnett Co. Sta. 21+00

Job Number: T-4937 ST-1

Test Date:

Test Number:

Sample Number: ST-1 (B-4137) **Soil Description:**

Boring Number:

Depth: 1.5-3.5ft

Remarks:

Sample Type: Undisturbed **Red Tan Clay Solid Height 0.5958 inches Est. Blows/ft= 4**

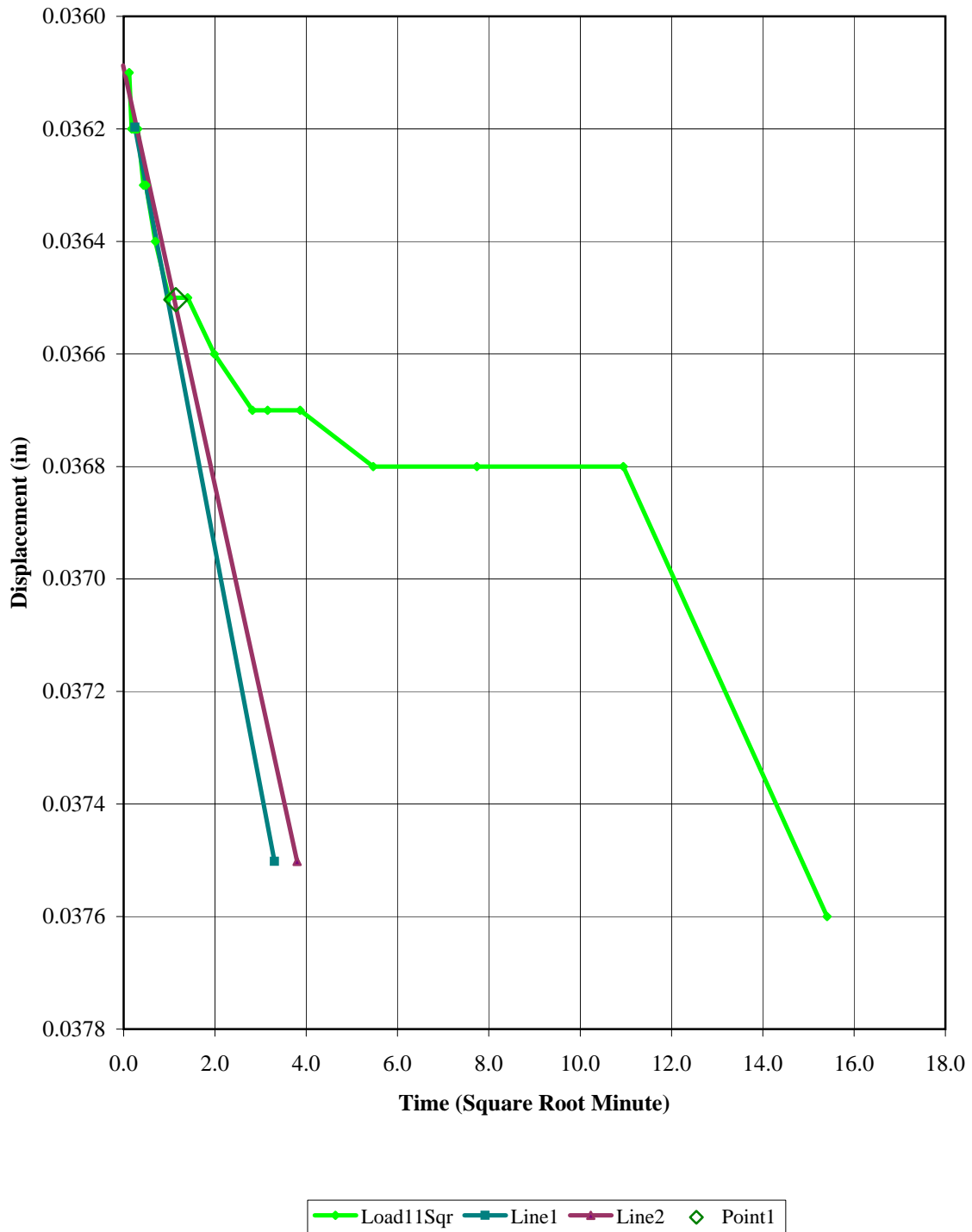
Index	Time	Displacement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0359	3.5000	0.6214
1	00:00:01	0.0361	3.5200	0.6210
2	00:00:02	0.0362	3.5300	0.6209
3	00:00:03	0.0362	3.5300	0.6209
4	00:00:04	0.0362	3.5300	0.6209
5	00:00:05	0.0362	3.5300	0.6209
6	00:00:06	0.0362	3.5300	0.6209
7	00:00:12	0.0363	3.5400	0.6207
8	00:00:15	0.0363	3.5400	0.6207
9	00:00:30	0.0364	3.5500	0.6205
10	00:01:00	0.0365	3.5600	0.6204
11	00:02:00	0.0365	3.5600	0.6204
12	00:04:00	0.0366	3.5700	0.6202
13	00:08:00	0.0367	3.5800	0.6200
14	00:10:00	0.0367	3.5800	0.6200
15	00:15:00	0.0367	3.5800	0.6200
16	00:30:01	0.0368	3.5900	0.6199
17	01:00:01	0.0368	3.5900	0.6199
18	02:00:03	0.0368	3.5900	0.6199
19	03:57:39	0.0376	3.6700	0.6185

Tested By:

Checked By:

**Consolidation Test Results
(Sequence 11) Load 1.000 tsf**

Consolidation Graph (Square-root Time)



Consolidation Test Results
(Sequence 12) Load 2.000 tsf

Project: ST-1 (B-4137)

Project Number: 33489.1.1

Location: Harnett Co. Sta. 21+00

Job Number: T-4937 ST-1

Test Date:

Test Number:

Sample Number: ST-1 (B-4137) **Soil Description:**

Boring Number:

Depth: 1.5-3.5ft

Remarks:

Sample Type: Undisturbed **Red Tan Clay Solid Height 0.5958 inches Est. Blows/ft= 4**

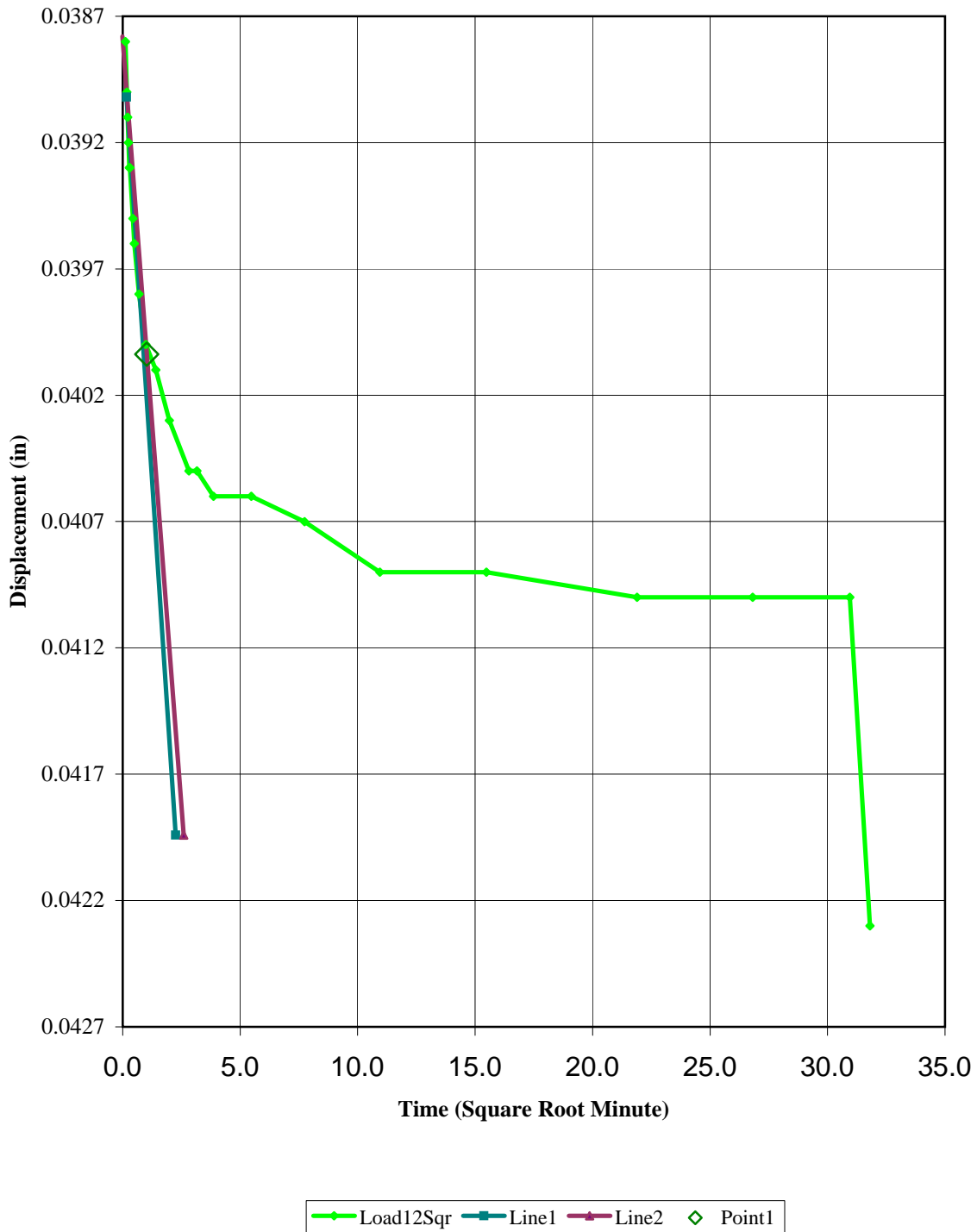
Index	Time	Displacement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0376	3.6700	0.6185
1	00:00:01	0.0388	3.7500	0.6172
2	00:00:02	0.0390	3.7700	0.6168
3	00:00:03	0.0391	3.7800	0.6167
4	00:00:04	0.0392	3.7900	0.6165
5	00:00:05	0.0393	3.8000	0.6163
6	00:00:06	0.0393	3.8000	0.6163
7	00:00:12	0.0395	3.8200	0.6160
8	00:00:15	0.0396	3.8300	0.6158
9	00:00:30	0.0398	3.8500	0.6155
10	00:01:00	0.0400	3.8700	0.6152
11	00:02:00	0.0401	3.8800	0.6150
12	00:04:00	0.0403	3.9000	0.6147
13	00:08:01	0.0405	3.9200	0.6143
14	00:10:01	0.0405	3.9200	0.6143
15	00:15:01	0.0406	3.9300	0.6141
16	00:30:01	0.0406	3.9300	0.6141
17	01:00:02	0.0407	3.9400	0.6140
18	02:00:03	0.0409	3.9600	0.6136
19	04:00:06	0.0409	3.9600	0.6136
20	07:59:53	0.0410	3.9700	0.6135
21	11:59:16	0.0410	3.9700	0.6135
22	15:58:39	0.0410	3.9700	0.6135
23	16:52:06	0.0423	4.1000	0.6113

Tested By:

Checked By:

**Consolidation Test Results
(Sequence 12) Load 2.000 tsf**

Consolidation Graph (Square-root Time)



Consolidation Test Results
(Sequence 13) Load 4.000 tsf

Project: ST-1 (B-4137)

Project Number: 33489.1.1

Location: Harnett Co. Sta. 21+00

Job Number: T-4937 ST-1

Test Date:

Test Number:

Sample Number: ST-1 (B-4137) **Soil Description:**

Boring Number:

Depth: 1.5-3.5ft

Remarks:

Sample Type: Undisturbed **Red Tan Clay Solid Height 0.5958 inches Est. Blows/ft= 4**

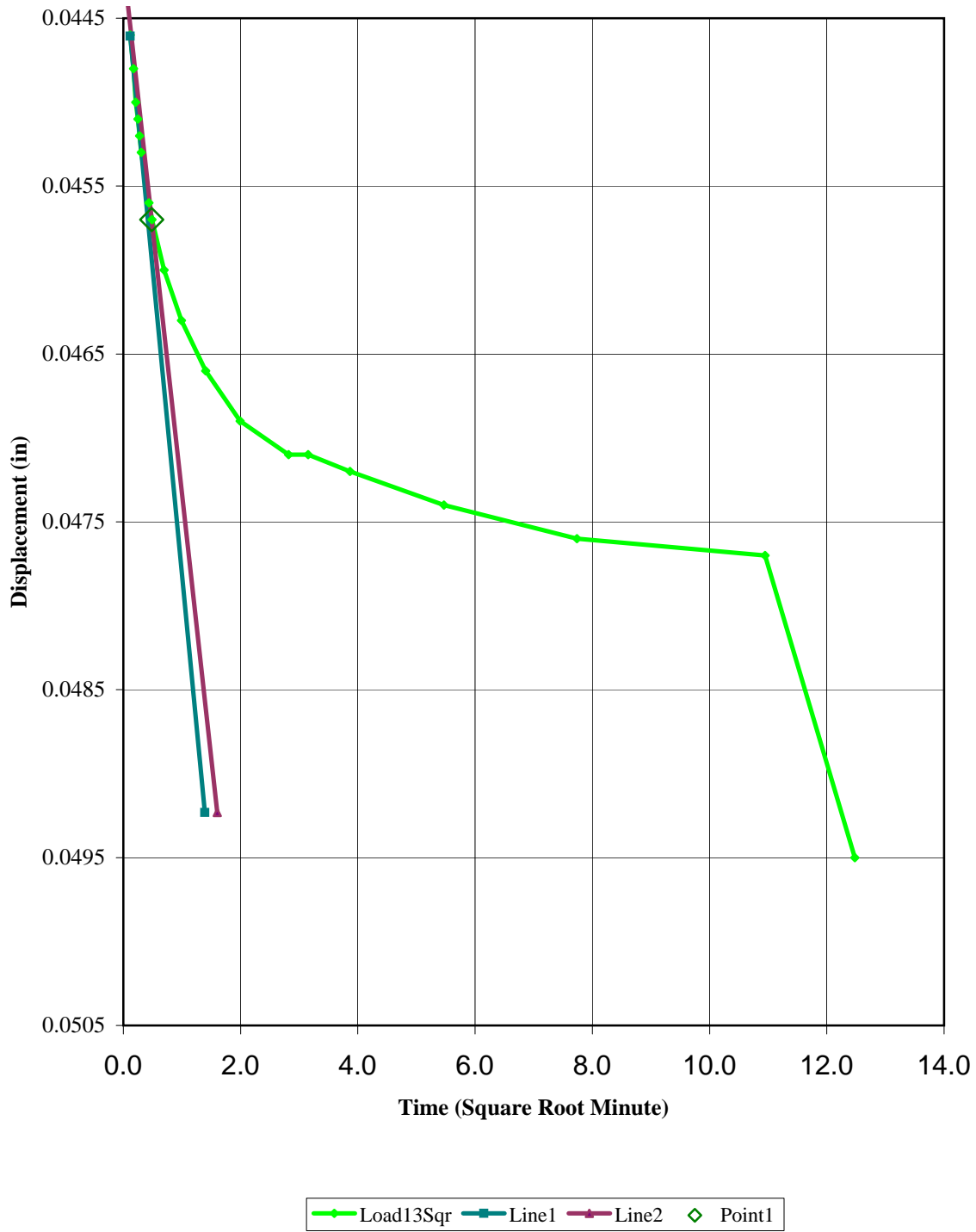
Index	Time	Displacement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0423	4.1000	0.6113
1	00:00:01	0.0446	4.2700	0.6084
2	00:00:02	0.0448	4.2900	0.6081
3	00:00:03	0.0450	4.3100	0.6078
4	00:00:04	0.0451	4.3200	0.6076
5	00:00:05	0.0452	4.3300	0.6074
6	00:00:06	0.0453	4.3400	0.6073
7	00:00:12	0.0456	4.3700	0.6068
8	00:00:15	0.0457	4.3800	0.6066
9	00:00:30	0.0460	4.4100	0.6061
10	00:01:00	0.0463	4.4400	0.6056
11	00:02:00	0.0466	4.4700	0.6051
12	00:04:00	0.0469	4.5000	0.6046
13	00:08:00	0.0471	4.5200	0.6042
14	00:10:00	0.0471	4.5200	0.6042
15	00:15:01	0.0472	4.5300	0.6041
16	00:30:01	0.0474	4.5500	0.6037
17	01:00:02	0.0476	4.5700	0.6034
18	02:00:03	0.0477	4.5800	0.6032
19	02:35:54	0.0495	4.7600	0.6002

Tested By:

Checked By:

Consolidation Test Results
(Sequence 13) Load 4.000 tsf

Consolidation Graph (Square-root Time)



Consolidation Test Results
(Sequence 14) Load 8.000 tsf

Project: ST-1 (B-4137)

Project Number: 33489.1.1

Location: Harnett Co. Sta. 21+00

Job Number: T-4937 ST-1

Test Date:

Test Number:

Sample Number: ST-1 (B-4137) **Soil Description:**

Boring Number:

Depth: 1.5-3.5ft

Remarks:

Sample Type: Undisturbed **Red Tan Clay Solid Height 0.5958 inches Est. Blows/ft= 4**

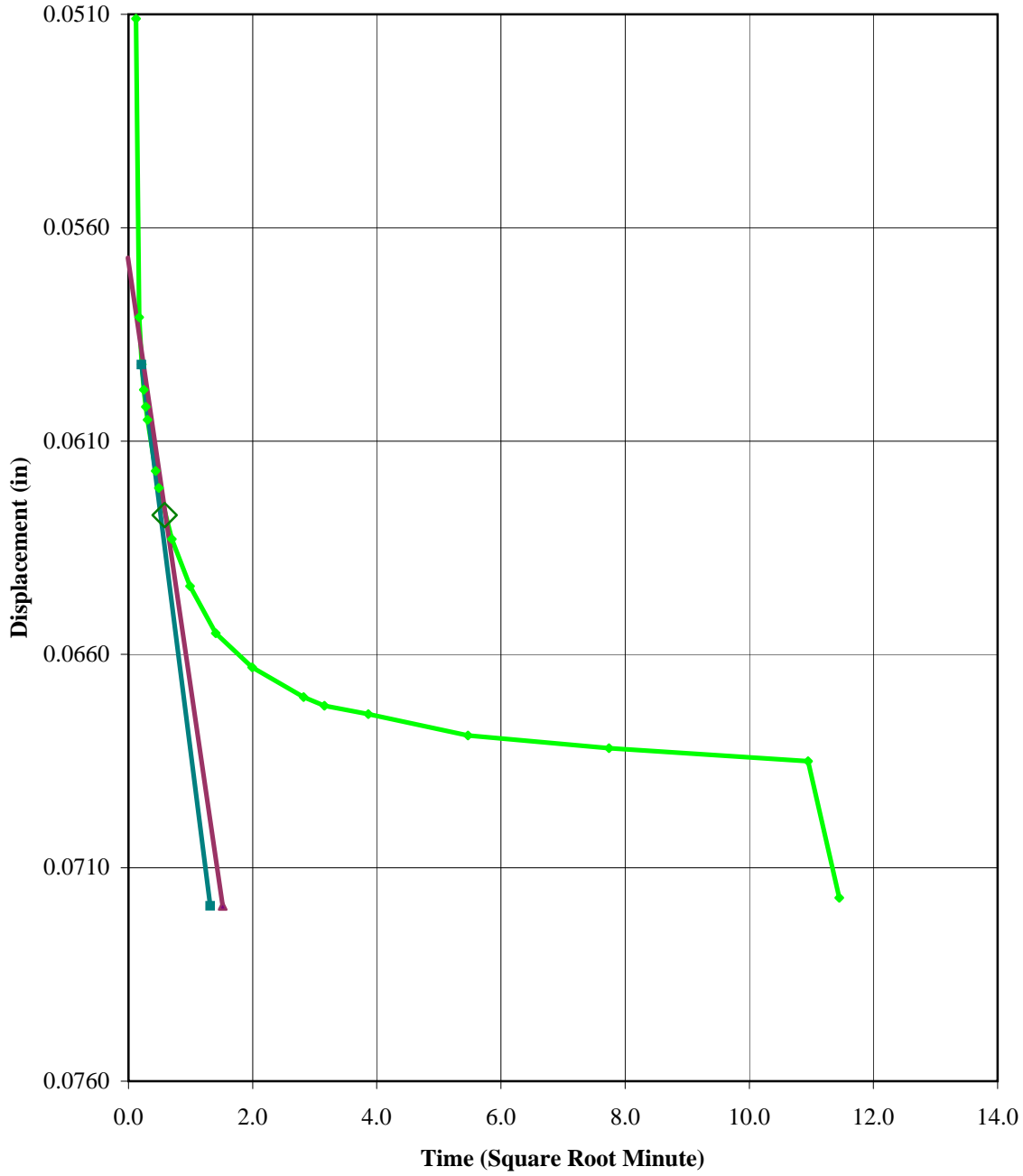
Index	Time	Displacement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0495	4.7600	0.6002
1	00:00:01	0.0511	4.7800	0.5999
2	00:00:02	0.0581	5.4800	0.5881
3	00:00:03	0.0592	5.5900	0.5863
4	00:00:04	0.0598	5.6500	0.5853
5	00:00:05	0.0602	5.6900	0.5846
6	00:00:06	0.0605	5.7200	0.5841
7	00:00:12	0.0617	5.8400	0.5821
8	00:00:15	0.0621	5.8800	0.5814
9	00:00:30	0.0633	6.0000	0.5794
10	00:01:00	0.0644	6.1100	0.5775
11	00:02:00	0.0655	6.2200	0.5757
12	00:04:00	0.0663	6.3000	0.5743
13	00:08:01	0.0670	6.3700	0.5732
14	00:10:01	0.0672	6.3900	0.5728
15	00:15:01	0.0674	6.4100	0.5725
16	00:30:01	0.0679	6.4600	0.5716
17	01:00:02	0.0682	6.4900	0.5711
18	02:00:03	0.0685	6.5200	0.5706
19	02:11:21	0.0717	6.8400	0.5653

Tested By:

Checked By:

Consolidation Test Results
(Sequence 14) Load 8.000 tsf

Consolidation Graph (Square-root Time)



Consolidation Test Results
(Sequence 15) Load 16.000 tsf

Project: ST-1 (B-4137)

Project Number: 33489.1.1

Location: Harnett Co. Sta. 21+00

Job Number: T-4937 ST-1

Test Date:

Test Number:

Sample Number: ST-1 (B-4137) **Soil Description:**

Boring Number:

Depth: 1.5-3.5ft

Remarks:

Sample Type: Undisturbed Red Tan Clay Solid Height 0.5958 inches Est. Blows/ft= 4

Index	Time	Displacement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0717	6.8400	0.5653
1	00:00:01	0.0814	7.6300	0.5520
2	00:00:02	0.0833	7.8200	0.5488
3	00:00:03	0.0842	7.9100	0.5473
4	00:00:04	0.0849	7.9800	0.5461
5	00:00:05	0.0855	8.0400	0.5451
6	00:00:06	0.0859	8.0800	0.5444
7	00:00:12	0.0877	8.2600	0.5414
8	00:00:15	0.0883	8.3200	0.5404
9	00:00:30	0.0904	8.5300	0.5369
10	00:01:00	0.0925	8.7400	0.5333
11	00:02:00	0.0944	8.9300	0.5301
12	00:04:00	0.0960	9.0900	0.5275
13	00:08:00	0.0971	9.2000	0.5256
14	00:10:00	0.0974	9.2300	0.5251
15	00:15:01	0.0979	9.2800	0.5243
16	00:30:01	0.0985	9.3400	0.5233
17	01:00:02	0.0990	9.3900	0.5224
18	02:00:03	0.0994	9.4300	0.5217
19	04:00:06	0.1000	9.4900	0.5207
20	08:00:12	0.1005	9.5400	0.5199
21	12:00:18	0.1007	9.5600	0.5196
22	16:00:24	0.1008	9.5700	0.5194
23	20:00:30	0.1009	9.5800	0.5192
24	24:00:35	0.1009	9.5800	0.5192
25	28:00:41	0.1010	9.5900	0.5191
26	32:00:08	0.1010	9.5900	0.5191
27	35:59:30	0.1010	9.5900	0.5191
28	39:58:53	0.1010	9.5900	0.5191
29	43:58:15	0.1010	9.5900	0.5191
30	47:57:38	0.1010	9.5900	0.5191
31	51:57:00	0.1010	9.5900	0.5191
32	55:56:22	0.1010	9.5900	0.5191
33	59:55:45	0.1010	9.5900	0.5191
34	63:55:07	0.1010	9.5900	0.5191
35	67:54:30	0.1010	9.5900	0.5191

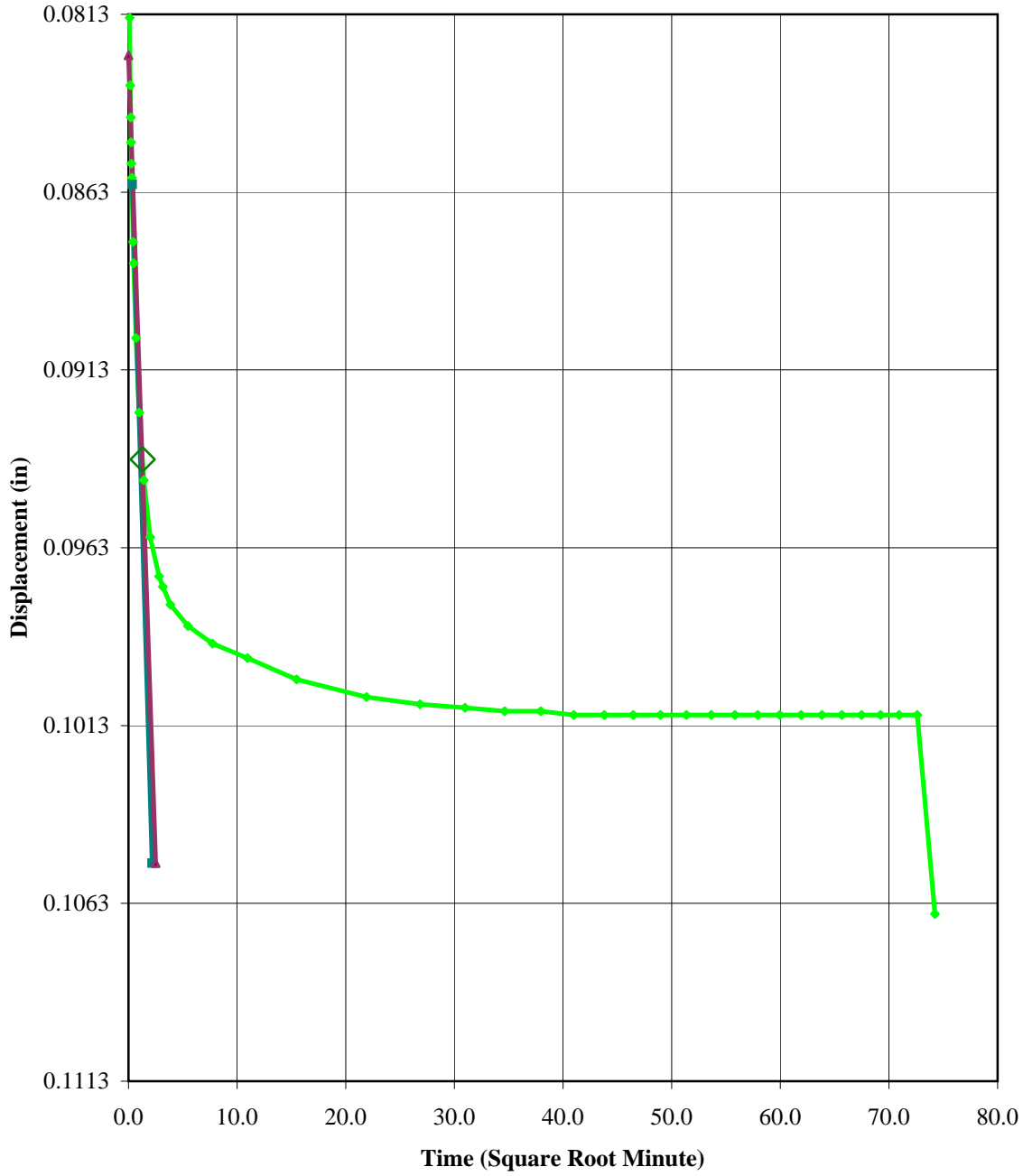
36	71:53:52	0.1010	9.5900	0.5191
37	75:53:14	0.1010	9.5900	0.5191
38	79:52:37	0.1010	9.5900	0.5191
39	83:51:59	0.1010	9.5900	0.5191
40	87:51:22	0.1010	9.5900	0.5191
41	91:50:44	0.1066	10.1500	0.5096

Tested By:

Checked By:

Consolidation Test Results
(Sequence 15) Load 16.000 tsf

Consolidation Graph (Squareroot Time)



Load15Sqr Line1 Line2 Point1

Consolidation Test Results
(Sequence 16) Rebound 4.000 tsf

Project: ST-1 (B-4137)

Project Number: 33489.1.1

Location: Harnett Co. Sta. 21+00

Job Number: T-4937 ST-1

Test Date:

Test Number:

Sample Number: ST-1 (B-4137) **Soil Description:**

Boring Number:

Depth: 1.5-3.5ft

Remarks:

Sample Type: Undisturbed Red Tan Clay Solid Height 0.5958 inches Est. Blows/ft= 4

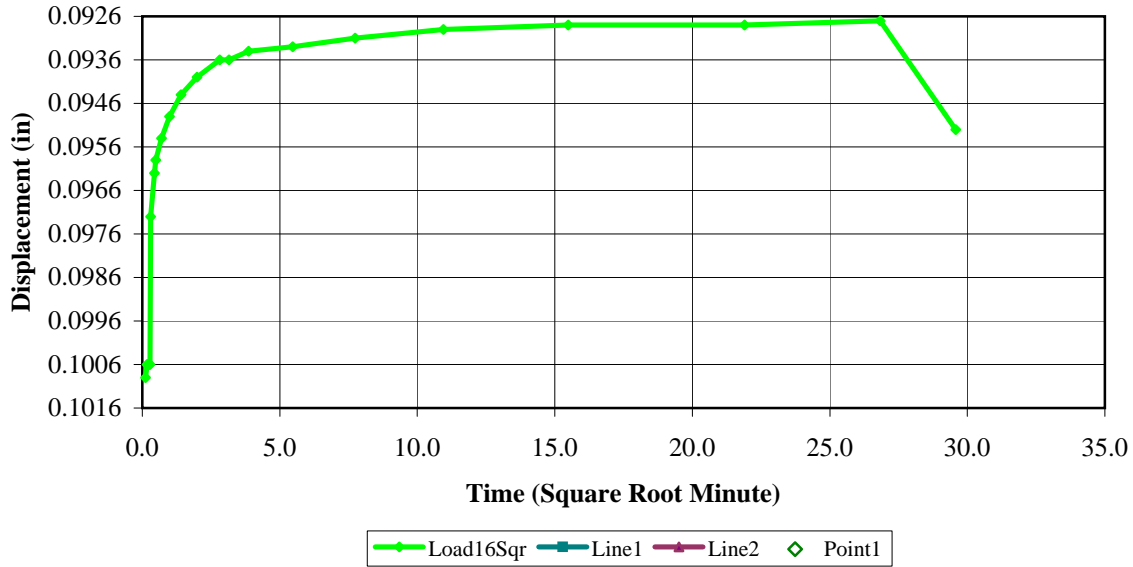
Index	Time	Displacement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.1066	10.1500	0.5096
1	00:00:01	0.1009	9.8300	0.5150
2	00:00:02	0.1006	9.8000	0.5155
3	00:00:03	0.1006	9.8000	0.5155
4	00:00:04	0.1006	9.8000	0.5155
5	00:00:05	0.1006	9.8000	0.5155
6	00:00:06	0.0972	9.4600	0.5212
7	00:00:12	0.0962	9.3600	0.5229
8	00:00:15	0.0959	9.3300	0.5234
9	00:00:30	0.0954	9.2800	0.5243
10	00:01:00	0.0949	9.2300	0.5251
11	00:02:00	0.0944	9.1800	0.5259
12	00:04:00	0.0940	9.1400	0.5266
13	00:08:00	0.0936	9.1000	0.5273
14	00:10:00	0.0936	9.1000	0.5273
15	00:15:00	0.0934	9.0800	0.5276
16	00:30:00	0.0933	9.0700	0.5278
17	01:00:01	0.0931	9.0500	0.5281
18	02:00:02	0.0929	9.0300	0.5285
19	04:00:05	0.0928	9.0200	0.5286
20	08:00:11	0.0928	9.0200	0.5286
21	12:00:17	0.0927	9.0100	0.5288
22	14:35:33	0.0952	9.2600	0.5246

Tested By:

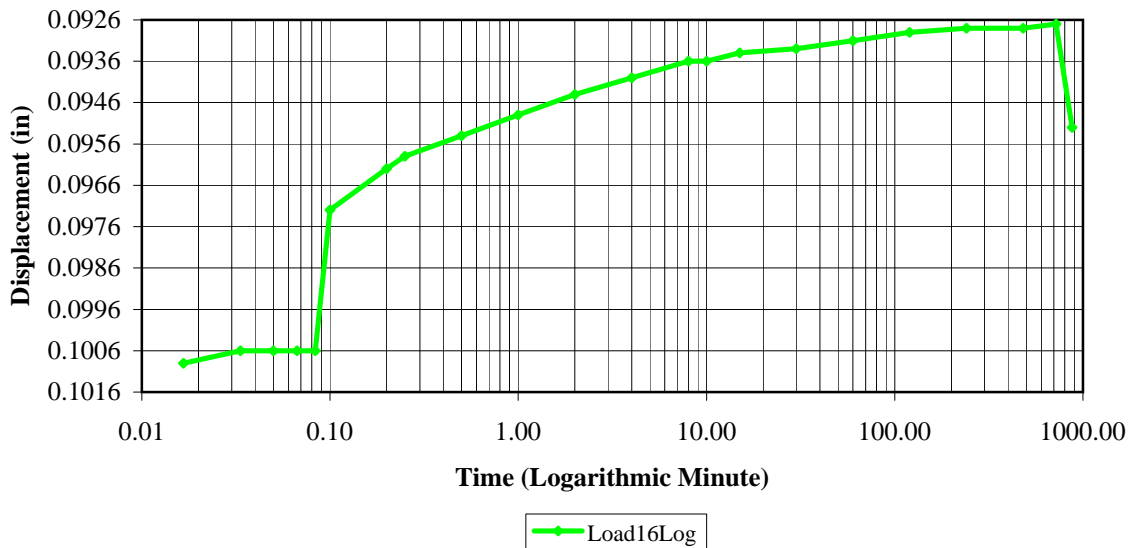
Checked By:

Consolidation Test Results
(Sequence 16) Rebound 4.000 tsf

Consolidation Graph (Square-root Time)



Consolidation Graph (Logarithmic Time)



Consolidation Test Results
(Sequence 17) Rebound 0.010 tsf

Project: ST-1 (B-4137)

Project Number: 33489.1.1

Location: Harnett Co. Sta. 21+00

Job Number: T-4937 ST-1

Test Date:

Test Number:

Sample Number: ST-1 (B-4137) **Soil Description:**

Boring Number:

Depth: 1.5-3.5ft

Remarks:

Sample Type: Undisturbed **Red Tan Clay Solid Height 0.5958 inches Est. Blows/ft= 4**

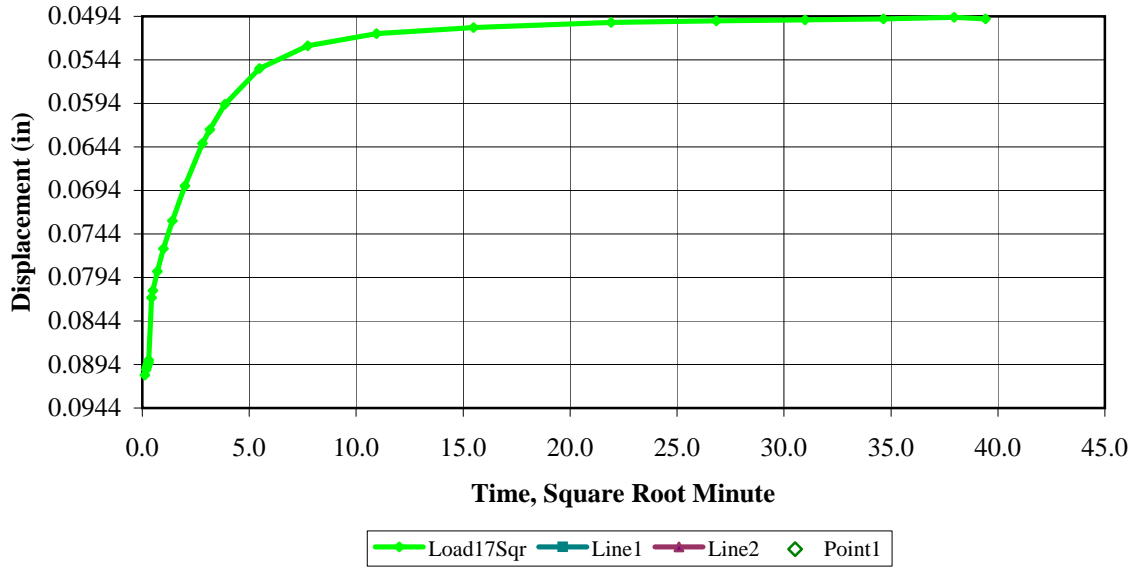
Index	Time	Displacement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0952	9.2600	0.5246
1	00:00:01	0.0906	9.0300	0.5285
2	00:00:02	0.0900	8.9700	0.5295
3	00:00:03	0.0897	8.9400	0.5300
4	00:00:04	0.0894	8.9100	0.5305
5	00:00:05	0.0892	8.8900	0.5308
6	00:00:06	0.0889	8.8600	0.5313
7	00:00:12	0.0817	8.1400	0.5434
8	00:00:15	0.0809	8.0600	0.5448
9	00:00:30	0.0787	7.8400	0.5485
10	00:01:00	0.0761	7.5800	0.5528
11	00:02:00	0.0729	7.2600	0.5582
12	00:04:00	0.0689	6.8600	0.5649
13	00:08:00	0.0640	6.3700	0.5732
14	00:10:00	0.0624	6.2100	0.5758
15	00:15:00	0.0595	5.9200	0.5807
16	00:30:01	0.0554	5.5100	0.5876
17	01:00:03	0.0528	5.2500	0.5920
18	02:00:07	0.0514	5.1100	0.5943
19	04:00:13	0.0507	5.0400	0.5955
20	08:00:27	0.0501	4.9800	0.5965
21	12:00:41	0.0499	4.9600	0.5968
22	16:00:54	0.0498	4.9500	0.5970
23	20:01:08	0.0497	4.9400	0.5972
24	24:01:22	0.0495	4.9200	0.5975
25	25:54:55	0.0497	4.9400	0.5972

Tested By:

Checked By:

Consolidation Test Results
(Sequence 17) Rebound 0.010 tsf

Consolidation Graph (Square-root Time)



Consolidation Graph (Logarithmic Time)

